Railway Age

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EDITORIAL

Railway Age

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A Hazardous Commodity

The number of tank car shipments of sulphuric acid of varying degrees of concentration has increased greatly in the last few years. This is a commodity of a dangerous character and accidents which would be negligible under ordinary conditions may be serious if acid is involved. The majority of railroad employees probably do not realize this; in fact serious injuries have resulted from men stepping into acid that has leaked from tank cars. All who have jurisdiction over, or are engaged in the movement of cars containing this product, should at all times exercise particular care and use all possible precautions to protect both the car and the lading. Switching crews are vitally interested in proper handling as a measure of self-protection. Yardmasters and others, having control of hump yards, should appreciate the necessity of strict adherence to the rule requiring car droppers to ride the cars to a standstill. Each car of acid carries the Bureau of Explosives' danger signal in the form of the regulation white label on both sides and ends of the tank, but familiarity breeds contempt for potential hazards and the warning is not infrequently disregarded. The significance of the placard should be recognized by all concerned in the interest of the operating road, as well as the tank car owner.

Little Progress in Concrete Design

Progress in engineering design is always most rapid during periods of intensive construction. Conversely, the least development occurs during periods of retrenchment. The truth of this principle with regard to the design of concrete structures during the last six years is exemplified most eloquently in a bulletin of the International Railway Congress on the subject of concrete work, which was written in 1914 by the late C. H. Cartlidge, but not published until December, 1920. The dearth of progress since this paper was written is an effective measure of the marked cessation of railway expansion. Railway concrete structures, barring the typical reinforced concrete, multiple-store building, are in a class by themselves. Even highway bridges, which are now being built in great numbers with the impetus to road construction, have little in common with railway structures. Consequently the progress in concrete work as regards design in lines outside the railroads has had little influence on railway practice. It is for this reason that there have been few recent developments to compare with those that took place during the period which saw the completion of the Tunkhannock viaduct, the building of the high abutments for the St. Paul trestles in the Bitter Roots, the inception of the reinforced concrete trestle design on the Burlington, the later years of track elevation at Chicago, and similar work on the Kansas City Terminal, unit construction roundhouses on the Santa Fe and butterfly train sheds at Denver and elsewhere. Of course, it is not presumed that all progress has ceased, but such developments as the concrete snow sheds of the Union Pacific and the use of flat slabs for grade separation work on the Lackawanna stand out as exceptions that prove the rule. Construction practice embracing such matters as proportioning, mixing, concreting in cold weather and surface finishes are common to all classes of structures whether built by railways, highway authorities or private individuals. Consequently, the railroads have shared in the progress along such lines even though the amount of work done by the railroads themselves has been very meagre. As regards design, on the other hand, further progress awaits the restoration of railway development on a scale commensurate with the needs of the country.

Who Is Stopping This Leak?

Figures, especially when expressed in millions, have little meaning unless they can be visualized by comparison. To state that loss and damage on American railroads for the year 1920 amounted to $280,000,000 may sound impressive. However, a better idea of the magnitude of this waste can be gained from the fact that last year it cost the railroads nearly as much as did taxes and almost half as much as locomotive fuel. The waste of fuel has been recognized for years as a serious cause of loss and the mechanical associations have given attention to reducing it to a minimum. Loss and damage has reached its present proportion only since the war. Some roads have effective organizations for dealing with it, but the majority of roads not only are not organized to combat the waste, but from all indications hardly realize that the problem exists. Yet the field for saving in this direction is probably as great as the possible saving in fuel. If fuel consumption were brought down to the irreducible minimum, probably not more than 25 per cent could be saved, in the present state of engineering development. On the other hand, probably 50 per cent of loss and damage is preventable, which would make the possible saving by correct practice approximately the same. At any rate, loss and damage represents one of the big leaks that the railroads should constantly be alert to stop.

Regulation of Clam Shell Transportation

A clam shell which is being propelled along a railroad track through the instrumentality of its own spontaneous internally-developed kinetic energy ought to be treated the same as a common gravel train; or, at least, that is the opinion of a grievance committee which recently appealed to the Railroad Labor Board at Chicago to adopt that ruling, as noticed in the *Railway Age* of February 18, page 413. To the weary newspaper reader who is hoping to see some rift in the clouds which now envelop the general railroad situation, the referring of such a petty detail to a company of men burdened with grave matters of nation-wide interest must seem absurd to the point of disgust. One of the characteristics, however, of these modern days of collective bargaining is the multitude of smallest details which the central powers—both of capital and of labor—are called upon to deal with and the incident of the clam shell may perhaps serve a useful purpose in showing us which way we are drifting. How long before our administrative and regulating machinery will come to a dead stop wholly because of internal friction?

The Interstate Commerce Commission—which costs us a thousand dollars a day—has to give the same sober attention to an overcharge on a carload of scrap iron from Texarkana to Poplar Bluff as to a general rate problem affecting the current freight earnings of 100,000 miles of railroad. The New York Public Service Commission has just issued and circulated a formal report rebuking a railroad company for being stingy with coal in a small country waiting room. In Canada, the railway commission recently formulated and published a ten-page report to please a grievance committee which, being short of grist for its mill, had complained about the irregular application of Rule 93 of the Standard Code. The commissioners evidently gave up the attempt to comprehend the merits of this much-discussed rule and decided the case along the line of least resistance—an expenditure of several hundred dollars with no discernible benefit to the public.

Difficulties of the British Railways

As the time approaches when the railways of Great Britain are to be returned to their owners it becomes increasingly apparent that the politicians are not disposed to provide the legislation needed to insure either an adequate return on the invested capital or to free the carriers from increased costs and vexatious restrictions which have arisen under government control. Most of the freight traffic of the British railways is hauled a relatively short distance. Competition by motor trucks is, consequently, an ever-present danger which makes rate increases beyond a certain point highly inadvisable. The adoption of the eight-hour day, the granting of greatly increased wage rates and the high prices which must be paid for supplies are a heritage from government control which the railways must accept. The chairman of the board of directors of one of the companies proposes that the government return the properties without restricting decreases in wages and without assuming control over rates. In this manner, he says, the companies can arrange to charge the rates which will bring the greatest returns and each road will be allowed to negotiate with its own employees to arrive at a wage scale which the company can afford to pay. Others propose, as the only means by which adequate returns on the invested capital can be assured and, consequently, the quality of service maintained, that the government continue paying the present guaranteed return until such time as the costs which have increased some 300 per cent under government control can be decreased sufficiently to allow the railways to pay adequate returns to investors out of regular earnings. It is to be hoped that the British government will soon realize the importance of securing for the railways the financial position which they must have if they are to keep apace with the growing needs of the country.

Railway Supply Exports in 1920

The exports of locomotives and passenger cars in 1920 were greater than those of any previous year. The figures compiled by the Bureau of Foreign and Domestic Commerce, shown in detail elsewhere in this issue, give 1,711 locomotives and 123 passenger cars as the totals for the year. The same totals in 1919 were 959 and 104, respectively, and the total value of locomotives exported during that year was considerably less than the $53,629,847 total for 1920, but the value of passenger car exports in 1919 exceeded the 1920 total. The export totals of other railway materials during the past year, however, afford less encouragement to those who desire to see American railway supplies maintain their position in the world's markets. Only 21,676 freight cars, valued at $37,192,502, were exported in 1920, as against 27,317, valued at $57,473,824, in 1919. In addition, the exports of car wheels and axles show a decrease of more than 20 per cent from the 1919 totals, track spikes more than 30 per cent, steel rails almost 10 per cent and miscellaneous track material almost 20 per cent. This decrease can be traced in most cases to a decline in buying power in our markets abroad and to renewed foreign competition. The situation is not, it would appear, altogether hopeless. If some arrangement can be made to extend long term credits to purchasers abroad the danger of competition on the part of foreign concerns, due now largely to exchange rates which are unfavorable to this country, will be materially lessened and the buying power of the foreign markets will be to some extent restored. The extension of such long term credits is the purpose of the Foreign Trade Financing Corporation which is now being organized under the Edge law. It is to be hoped that its plans for meeting the serious problems which now confront our export trade may secure from the American people the hearty support which is necessary if they are to succeed.

A Demoralizing Influence

A close study of car conditions will disclose a large number of difficulties in the way of effecting a permanent improvement, and it is not possible to cover them all in a brief classification. It is probable, however, that the three most pronounced difficulties are a lack of adequate facilities, considering the railroads of the United States as a whole, the continued perpetuation of weak equipment and a lack of uniformity in the distribution of the burden of car repairs. These conditions are not new, but with the growth of traffic and the increasing severity of operating conditions they have gradually become more aggravated in spite of all efforts to bring about permanent improvements. The continuance of these conditions suggests that there is something fundamentally wrong in the methods of dealing with them. One such fundamental weakness is the policy of fixing prices for labor and material for foreign car repairs only high enough to cover the actual cost plus overhead for the average railroad. Of course, an attempt to attribute all of the evils in the car situation to this policy would be futile, but it is equally futile to attempt to prove that this policy does not exert a strong influence toward their continuance. Prices set to cover the bare cost plus overhead for average conditions, necessarily do not cover these items for roads whose costs are higher than the average. These roads, therefore, have little incentive to provide facilities to take care of their full share of the burden of car maintenance, as their immediate interests may often seem to be best served by continuing to do only what is necessary to keep cars moving on their own lines. The result is that the roads with comparatively low costs or with operating conditions which demand a high standard of car maintenance for safety, are burdened with an abnormally large share of the maintenance. Such roads must often do extensive work on weak equipment at prices considerably lower than the actual cost of the same work if performed by the owning road. It seems evident that such prices exert a demoralizing influence, not only tending to perpetuate, but actually to aggravate, the evils of the car situation. Would not a scale of prices definitely established to include a profit of 10 or 15 per cent under average conditions exert a powerful influence toward the equalization of the burden of freight car maintenance? It is true that the profit of those roads whose costs are low would be considerably higher than the 10 or 15 per cent; but on the other hand, those roads whose costs are high would not be compelled to take a loss should they attempt to do their full share of the work.

Enactment of the Winslow Bill

PROBABLY IN THE FUTURE we shall look back to the signing of the Winslow Bill by President Wilson as marking the beginning of a substantial and important improvement of conditions in the railroad and railway supply industries. It will be some time before large amounts of the money authorized to be paid to the railways in installments will be received by them. The passage of the bill makes certain, however, that as soon as the Treasury Department can raise sufficient funds the railways will begin to receive part of their money. The new national administration which takes control today will naturally want to promote a revival of business as rapidly as practicable, and there is no way immediately available by which it can do this better than by speeding up payments to the railroads. Because the government owes hundreds of millions of dollars to the railroads, they owe proportionately large amounts to companies from which they have bought materials and supplies. These concerns in turn have borrowed heavily at the banks. This condition has reduced railroad purchases, seriously hampered and almost bankrupted many railway supply companies, and impaired the ability of the banks to furnish credit to concerns desiring to enlarge their operations. There can be do doubt that as the railways are enabled to pay their present current indebtedness they will begin to buy materials in larger amounts. This in turn will help the railway equipment and supply business, and whatever causes activity in any particular line of business is bound to help the general business situation.

The passage of the Winslow Bill through Congress by large majorities, and its prompt signing by President Wilson, were a strong indication not only of the public sentiment which demands fair play for the railroads, but also of the loss of influence of certain labor organizations. The leaders of these labor organizations sought to prevent passage of the bill, and they appealed to the President not to sign it. It has not been many years since the government at Washington heeded pleas from them which were hardly more unreasonable. Their activities in connection with the Winslow Bill had apparently no influence at all. The enactment of this legislation was important in itself, and even more important as an indication of public sentiment.

Farmers and the Railroad Situation

ONE OF THE MOST fundamental troubles with the business situation in the United States today is that the purchasing power of the farmers, who are the largest class of its people, has been largely destroyed. The purchasing power of the farmers has been largely destroyed by heavy reductions in the prices of practically all the things they have to sell, which have not been offset by corresponding reductions in the prices of most of the things that they buy.

The farmers produced more grain in 1920 than ever before. But their power of buying is determined by the total amount for which they can sell their products.

The aggregate value of their products measured in the prices of farm machinery, automobiles, coal, railroad transportation, building materials, is less than it has been in years. Until their purchasing power is restored they will and must buy much less of almost everything than they have bought heretofore.

With them buying so much less there is an inevitable reduction in the amount of commodities of all kinds that the merchants can sell, that the manufacturers and the mines can produce, that the railways can get to transport. This reduction in mercantile, manufacturing, mining and transportation activity inevitably results in all these industries laying off many thousands of men. The consequence is the widespread unemployment that now prevails, which in itself reduces the demand for farm products and the prices of them.

There is but one remedy for this condition. This is to restore the purchasing power of the farmers. Theoretically this might be done either by increasing the prices of the things they sell or reducing the prices of the things they buy. As a practical matter it cannot be done in the former way. The decline in the prices of farm products is due to worldwide conditions, and there is no prospect of conditions so changing as to cause a substantial increase in these prices.

The purchasing power of the farmer must be restored by reductions in the prices of the things he buys. The main reason why reductions cannot be made in the prices of many of these things is the present high cost of producing them. This high cost, in turn, is mainly due to the reduced productivity and high wages of labor in many industries.

The wages of coal miners are higher than ever before. This keeps up the price of coal. Coal enters largely into the cost of manufacturing and of conducting transportation. Therefore its high cost tends to keep up the cost of manufacturing and of operating railroads. The railways, owing to artificial, rigid and iniquitous rules and working conditions, are being forced to employ an excessive number of men, and, in addition, are paying the highest wages ever known. The high price of fuel, and especially the present rules and working conditions and wages, are making the cost of railroad operation excessive. This, in turn, renders it impracticable to reduce the freight rates the farmers or any other class pay. On the present rates the railways are earning an utterly inadequate return. On a six per cent annual basis they should have earned $408,000,000 net operating income in the last four months of 1920. They actually earned $233,146,000. They should have earned $87,000,000 in December; they earned only $17,000,000.

The costs of producing the things the farmers buy should be reduced in order that the prices that the farmers must pay for them can be reduced. The cost of railroad operation especially ought to be reduced so that the freight and passenger rates the farmer must pay can be reduced.

While, however, the farmers have suffered heavy losses by reductions in their prices, and owing to these reductions in their prices they have had their purchasing power largely destroyed, organized labor throughout the country, and especially on the railroads, is opposing every effort to reduce the labor costs of the things that the farmer must buy.

The railway companies are seeking the abolition of the wasteful rules and working conditions adopted under government control. They are seeking reductions of the wages of unskilled labor, for which they compete with the farmers in every community in the country. The railroad payroll now constitutes at least 65 per cent of total railroad operating expenses. It must be reduced if there are ever to be any reductions of rates.

Organized labor meets this situation by carrying on Plumb plan propaganda among the farmers and by opposing every effort made by the railways to get changes in working conditions and wages which will enable them to operate more efficiently and economically, and thereby make possible reductions in freight and passenger rates.

There are many farmers who apparently think that the present high rates of the railways are maintained to enable them to earn fancy profits. In the month of December, 1920, the total wages paid to railway employees amounted to about $300,000,000, while the total net operating income received by the companies was about $17,000,000. The farmers are being injured by having to pay railway rates that are too high in proportion to the prices of the farmers' products, and the railways are being ruined because with present rates, present traffic and present operating costs they cannot earn anything approaching a reasonable return.

The purchasing power of the farmers must be restored. Not only their welfare, but that of the entire country demands it. Normal general business and normal general prosperity cannot return until the purchasing power of the farmers has been largely restored. Since it can be restored only by reducing the costs of production in other industries, and the cost of transportation, it is high time that the farmers should begin directly to interest themselves in the efforts being made by business men and railroad managers to reduce production and transportation costs.

Since labor costs are now about 65 per cent of the total operating expenses of the railways, the Railroad Labor Board, with its control of rules, working conditions and wages, virtually has control of 65 per cent of the operating expenses of the railways. The railways are before the Board trying to get action which will enable them to reduce these labor costs. Since not only the present extremely small net earnings of the railways, but also the present high freight and passenger rates, are mainly due to these high labor costs, the farmers and others who pay railway rates should recognize the fact that the railway managers, in trying to reduce labor costs, are working in the interest of those who pay the rates.

Railroad Returns for 1920

TAXES PAID by the railroads in 1920—or those for which they became liable, because some of the roads are behind in their tax bills as well as other bills—amounted to 4½ times as much as the net operating income which the roads earned for their owners. Total operating revenues for the year, according to the Interstate Commerce Commission statistics made public this week, were $6,225,402,762, the largest in the history of the railroads and $1,041,000,000 greater than for 1919. Operating expenses, however, consumed $5,826,197,474 of this, or $1,406,000,000 more than in 1919, and taxes, $281,380,620, or $83,000,000 more than in 1919. Taxes include $33,349,938 of war taxes for the period from March to December after the roads were returned by the government. After deducting for uncollectible revenues and equipment and joint facility rents this leaves a net operating income, or profit from railway operations, of only $62,264,421.

This compares with an average of over $900,000,000 for the three years preceding the war. It represents a return of about one-third of one per cent on the valuation of $18,900,000,000, which the Interstate Commerce Commission used for the purposes of the rate case. It is less than the roads should earn in one month to receive the 6 per cent which the Transportation Act prescribes as the measure of a fair return on the investment. It is less than one-fourth of the taxes charged by local state and federal governments for the privilege of owning property and doing business and the protection of the laws, and it represents a profit of almost exactly 1 per cent on the gross business done during the year when the railroads handled more freight and passengers than ever before in their history.

These figures strikingly illustrate the importance to the railroads of the relief to be afforded by the Winslow bill, which authorizes partial payments, pending final settlement, of the guaranty provided for by the Transportation Act for the six months following the termination of federal control, which has just been signed by the President. Without the guaranty most of the railroads would have been bankrupt several months ago, particularly as the entire net operating income of $62,000,000 was earned by only about half of the Class I railroads, the other half having deficits for the year. With the promise of the guaranty and with the assistance of about $262,000,000 actually advanced on applications filed prior to September 1, the roads have struggled along for a year but it took a new law, passed a year after the passage of the Transportation Act, to make any of the balance available and the relief could not have been delayed much longer without disastrous results.

The total guaranty for the six-months period is estimated at about $600,000,000, of which about $200,000,000 has already been paid out for back wages under the Railroad Labor Board award of July 20. In addition the railroads received about $150,000,000 for their guaranty for January and February, 1920, when they were still under federal control. While the tax-payers are grumbling about paying the guaranty, they might pause to remember that the railroads themselves have to pay nearly half of it for their taxes.

New Books

The Maintenance of Way Cyclopedia, edited by E. T. Howson and E. R. Lewis. 860 pages, 2,500 illustrations. 11½ in. by 8½ in. Bound in cloth and leather. Published by the Simmons-Boardman Publishing Company, Woolworth building, New York City. Price, cloth $10, leather $15.

This is the latest of the series of cyclopedias and dictionaries to be published by the Simmons-Boardman Publishing Company. It also represents another step in the plans of this company of some 10 years' standing for the fuller treatment of maintenance of way subjects, which was started in the publication of the Maintenance of Way Section of the *Railway Age* and which later developed into an independent form in the Railway Maintenance Engineer. The cyclopedia is a companion book to the Car Builders' Dictionary and the Locomotive Dictionary which have been issued by the same publisher at intervals for upwards of 30 years. It has been edited in co-operation with the American Railway Engineering Association, with the assistance of a committee of this association appointed for that purpose. It represents an endeavor to place in permanent form between the covers of one volume, the vast fund of information contained in a variety of texts, association proceedings, personal papers, etc. But the work goes much further than this in that a large amount of material is presented which has received little or no treatment heretofore.

Consistent with the adoption of the term "cyclopedia" the authors have endeavored to make the contents of interest and value alike to the railway employee engaged directly in some particular branch of maintenance of way as well as to the general or operating officer who finds it necessary to enlarge his knowledge of maintenance of way matters because of his general responsibility over the work of that department. The needs of the purchasing and stores officers, who are required to deal with maintenance of way materials, have also been kept in mind. As stated in the preface: "The thought has been to select that which is representative of the best in the maintenance of way field, to incorporate the most modern methods, to include those standards bearing the approval of the prominent technical societies and to show those devices which have been proved to be of undoubted value."

A particular effort has been made to include a large amount of maintenance of way information not previously presented in a permanent form and to clear up confusion of terminology as far as possible in this volume, the editors having co-operated with the American Railway Engineering Association and allied technical associations in the adoption and use of preferred terms. In general the nomenclature of the Manual of the American Railway Engineering Association has been accepted. The work of this association

was also drawn on in no small measure by incorporating the latest specifications approved by that organization as well as standard plans, etc. In order to make the book most readily usable it has been arranged in two separate departments, editorial and catalog, while the editorial portion has been further subdivided into sections, each relating to some particular branch of maintenance of way and each with its own alphabetical arrangement. Thus, there are separate sections for track, bridges, buildings, water service, signals, and wood preservation, as well as a general section to cover miscellaneous unclassified subjects.

The catalog section of 218 pages is designed to supplement the general information in the text section with itemized descriptions and illustrations of specific devices referred to more generally in the text section. Here the reader can supplement the general facts gained from the text pages with specific information concerning the particular line of products he desires to investigate. To insure that the reader will find all matter relating to any subject, a general subject index is given in the front of the volume, give page references to all sections of the book where the subject is treated in any way. In addition the catalog section is fully indexed by a directory of products, an alphabetical index of manufacturers and a trade-name index.

Straight Business in South America. By James H. Collins. 285 pages, 5 in. by 8 in. Bound in cloth. Published by D. Appleton & Co., 35 West 32nd street, New York City.

An unbiased American, with his eyes and ears wide open solely for information on Latin America for his countrymen, has returned after eight months of intimate contact with the South Americans, and his book, a result of that expedition, apparently omits nothing of value for those who know little of the respective countries on that continent and are interested in trading or building in Latin America. To them, a careful reading of this book, as well as the preparation therefor of a permanent space on the book shelf for reference, is advisable. Its index will be found useful in its references to paragraphs on "American Backwardness in South America," "Misrepresentative Americans," "The Argentino as a Spender," "Picking Up the Spanish Language," "Thrift," "Time" and "Tassajo," as well as hundreds of other intimate items which convey the writer's familiarity with the countries visited, their inhabitants and their views on the methods of the Yankee, as well as their opinions on his competitor, the European. Chapter XI, "Why South America Needs Continental Methods," conveys a bird's-eye view of what South America's railway systems are—and are not. It points out the opportunity for reward to the railway builder, and the South American's attitude on the investments of the foreigner.

At the present time there is much talk of the narrow viewpoint of laboring men due to specialization in industry. It is undoubtedly true that the majority of workers have very limited knowledge of the products that they help to produce with the exception of that part on which they are directly employed. Modern workmen are not unresponsive when efforts are made to give them a broader knowledge of their work, however, as is well illustrated by the experience of the Industrial Works, Bay City, Mich. This company has been conducting a "Crane College" for shop and office employees to teach them more of the results of their daily work. The course consists of eighteen lectures, one each week, by various department heads best fitted to handle their subjects. So great was the interest developed in the portion of the course dealing with air brakes that, as an offshoot of the "Crane College" proper, an intensive series of lectures on the Westinghouse air brake was given, in which 69 students were enrolled.

Letters to the Editor

Do the Work at the Initial Terminal

St. Paul.

To the Editor:

I am a firm advocate of classification at the initial terminal so that trains will leave in station order. Many roads in the west use this system, while others use the zone system. However, some roads, notably the larger and more prominent lines, throw their trains together indiscriminately at the initial point with the idea that the required classification will be obtained in the course of rehandling at the intermediate yards. A number of roads practice this and go farther by wiring the next terminal information concerning the exact position of all cars in a train and their destination. This helps the intermediate yardmaster considerably in preparing for the fray, but in case of reduction on lower commodities and an application of more important freight, the only thing left for him to do is to re-switch the train, with the result that approximately two hours is lost. When this is repeated at, say, every freight terminal between the Mississippi river and the Pacific coast, it is not surprising that a lot of time has been lost. If the train were properly classified at the initial terminal and each subsequent terminal is advised concerning the consist of the train, the "add" can properly be aligned to cut in and the "cut out" can be quickly handled, one hour will be the maximum time required.

I have noticed that refrigerator cars are often in several different positions in a train, whereas they could easily be assembled and a minimum time used for the service. It is absurd to suppose that a train of high class freight thrown together haphazardly at its initial terminal will right itself by the time the final destination is reached. Has consideration been given to the amount of switching required at the intermediate yards? The relative importance of high class freight traffic on any railroad is the same to the freight traffic manager as the high class passenger traffic is to the passenger traffic manager. It is hardly probable that the large roads out of Chicago and St. Louis would place in the middle of the train a Pullman that was to be cut out at the first junction point. Then why not give the same observance to the freight traffic?

Emmett H. Burch.

Don't Neglect Refrigerator Cars

Chicago.

To the Editor:

The average person has only a slight conception of either the service performed by the refrigerator car, or of the necessity for it under our present mode of living. The time is long past when such delicacies as grapefruit, oranges and sea foods are considered luxuries, to be enjoyed only by the wealthy, for within the last 20 years the refrigerator car has placed these and similar commodities within reach of all.

To illustrate the extent to which this refrigerator car service is now used, we find that during the year 1917 the Class I roads transported approximately 30,000,000 tons of perishable freight, requiring the movement of 2,300,000,000 refrigerator car miles. But while railroad men may justly regard this work of distributing perishable commodities throughout the length and breadth of the land with pride, the service is still far from perfect. In fact these imperfections, represented by claims paid out for loss and damage to perishable freight during 1919 approached $13,000,000, and this

sum, based on the invoice value of the goods in carload lots, does not begin to represent the economic loss to the country as a whole.

In my opinion this tremendous waste can be overcome in some measure by closer co-operation between shippers and carriers, and by co-ordination of effort between the carriers themselves. The shipper, for example, should see that the cars intended for perishable freight are in condition to give adequate service, and are properly cooled or heated according to the season and the commodity to be transported. He should not fail to instruct the carrier as to the attention which his shipment will require en route, whether it be icing, ventilating or protection against cold. The carriers, on the other hand, are especially interested in the condition of their cars, in maintaining schedule time, and in carrying out the instructions of their shippers to the letter.

It is significant that the roads best equipped to handle the refrigerator car business, are the ones to secure this business to handle. In many instances they have created perishable freight departments manned by specialists who devote their entire time to the work. The officers of these roads find that their expenditures in this direction are repaid many times by their savings in claim payments and by the continued good will of their patrons. During the past few years, however, the maintenance and development of refrigerator equipment in general has not kept pace with the increasing demand for, and production of perishable products. War-time conditions, too, interfering with the construction of new cars, and the adequate repairing of existing equipment, have resulted in a condition so serious that measures must be taken quickly to enable the carriers to handle the increasing volume of perishable freight without a still more enormous bill for loss and damage than they now have.

I hope that our executive officers, in allotting their funds for 1921, will realize the seriousness of this situation, and will look with consideration upon two items—repairs to refrigerator cars, and new refrigerator equipment. With the application of these remedies it does not seem too much to expect that we can reduce the $13,000,000 paid out in loss and damage claims on perishable freight in 1919, at least to the pre-war figures of $2,750,000. And surely this would seem worth the effort.

J. D. Shields,
Freight Claim Agent, Chicago, Burlington & Quincy.

Two Opposing Views on Maximum Car Loading

New Britain, Conn.

To the Editor:

In 1919, during the life of the Railroad Administration, the question of maximum car loading now being discussed in your columns was before the shippers of the country and was given every consideration, and the shippers co-operated (at some cost to themselves) so as to get the full benefit of all available equipment. There is a limit to this loading of equipment, based upon commercial usage, classification, and tariff minimums. Shippers, at much inconvenience and financial loss, and receivers, at a much greater outlay financially, handle, and have been handling, larger quantities of merchandise than they would under ordinary commercial conditions. The return of the carriers to corporate control and operation was a relief to the commercial interests of the country, in that it again opened up competition among carriers and the fight for conservation of equipment was not as strenuous as it was under federal control.

The loading of cars to full visible or carrying capacity, of less than carload shipments for various points, does not bring satisfactory results; nor is it conservation of equipment. It ties up more cars at transfer points, for the reason that a check clerk and trucking crew can handle four cars reasonably loaded where they are handling one loaded to the roof. Further, the amount of damage in cars so loaded offsets any other advantage which might be named.

We are being requested by the carriers to load, as far as possible, all shipments of 10,000 lb. direct to final destination, to save extra labor and handling at transfer points. This we have always done. I am very sure that the shippers will do everything they possibly can to conserve equipment, but the carriers should not overlook the commercial customs and necessities, and the fact that it is the continual movement of water over the dam that operates the mill, rather than a large volume today and nothing tomorrow. It is the same way with business. There must be a continual movement of raw material in to the factory, and finished product out. The receiver or jobber must count upon the source of supply and his ability to spread his capital out and turn it over a number of times, rather than invest in large quantities of some article or commodity which is liable to be left on his hands for a long period.

R. W. Poteet,
Manager, The Stanley Works.

Mansfield, Ohio.

To the Editor:

The grain trade has for several years been compelled, with minor exceptions, to give maximum loading in that the tariffs of the carriers call for loading cars to full capacity. This trade, more than any other interest, has given capacity loading and at a sacrifice to itself. In a great many cases by loading so heavily it has not been possible to obtain proper inspection upon the inbound road and the shipper has had to accept deterioration in grade, due to the condition of the grain and delay in switching at terminals. In a great many cases at the small country points where the shipper has only a minimum quantity of grain to load, he needs a 60,000-lb. or 80,000-lb. capacity car, but was furnished a 100,000-lb. capacity car. In consequence the shipper was compelled to pay for dead space due to the rule of having to load to the capacity of the car.

Under these circumstances I could not advocate, for the grain trade, any more intensive loading than that in effect. On the contrary, as a matter of common justice to the grain trade, the rules in effect should be modified to a more equitable basis. The grain shipper will always load the cars to capacity when cars are scarce and the condition of the grain will warrant such loading, because he is anxious to secure elevator space and take advantage of market values. Therefore the rule which is in effect with the carriers does not increase the loading but creates a hardship at times.

H. L. Goemann,
Chairman Transportation Committee,
Grain Dealers' National Association.

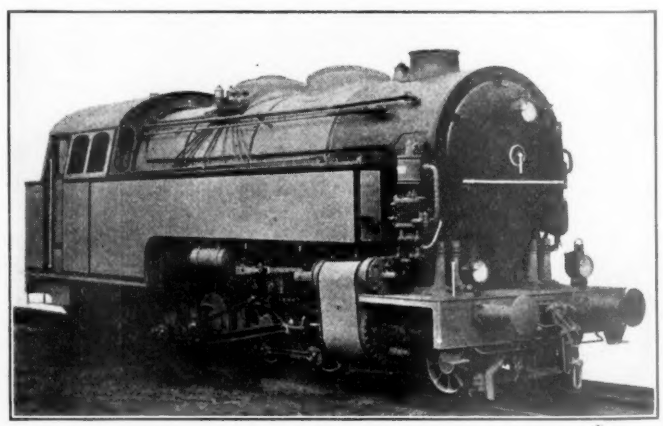
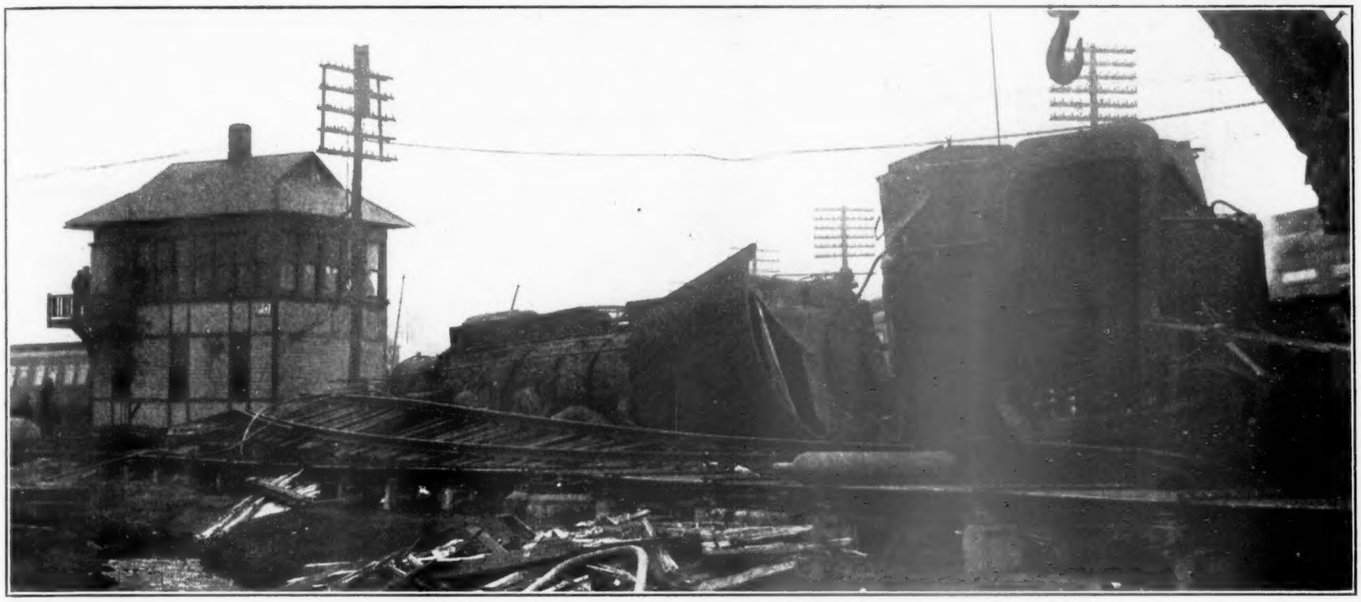


Photo by Gilliams Service

A New Switching Locomotive Recently Completed in Germany

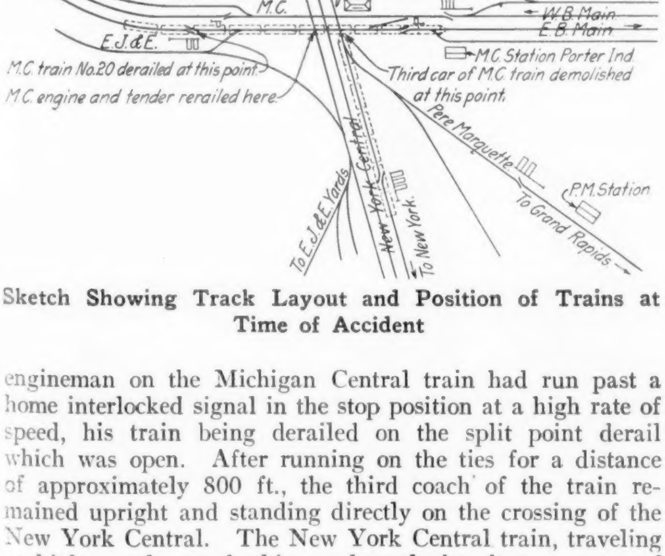


Position of New York Central Engine After the Accident. Photo by International

Passenger Trains in Disastrous Collision

Michigan Central Train Runs Over Derail Onto Crossing and New York Central Train Crashes Into It

On Sunday evening, February 27, westbound New York Central passenger train No. 151 plowed through the third coach of eastbound Michigan Central train No. 20, at an interlocked crossing of these lines at Porter, Ind. Thirty-seven persons were killed and 4 seriously injured. Preliminary investigation indicates that the



Sketch Showing Track Layout and Position of Trains at Time of Accident

engineman on the Michigan Central train had run past a home interlocked signal in the stop position at a high rate of speed, his train being derailed on the split point derail which was open. After running on the ties for a distance of approximately 800 ft., the third coach of the train remained upright and standing directly on the crossing of the New York Central. The New York Central train, traveling at high speed, struck this coach, reducing it to a mass of kindling wood.

The trains involved in the collision were New York Central westbound passenger train No. 151, known as the "Interstate Express," and Michigan Central eastbound passenger train No. 20, known as the "Canadian." The accident happened on the crossing of the interlocking plant at Porter, Ind., 40 miles southeast of Chicago on the New York Central and 44 miles southeast of Chicago on the Michigan Central. Both trains were approaching the crossing at a high rate of speed. Investigation after the accident disclosed that the levers in the interlocking machine were in the proper position to permit of a westbound movement on the New York Central and that the routes on the Michigan Central were set against the passage of trains. The New York Central train No. 151 leaves Buffalo daily at 8:30 a. m. and is due to arrive in Chicago at 7:30 p. m. This train is scheduled to arrive at Porter, Ind. (Norwood), at 6:21 p. m.

Michigan Central train No. 20 leaves Chicago at 5:05 p. m., arriving at Windsor, Canada, at 1:45 a. m., where it is turned over to the Canadian Pacific for movement to Toronto, Montreal and points east. The train was made up largely of Canadian Pacific cars, the baggage car, smoker, day coach and three sleepers being Canadian Pacific equipment, while the diner and two sleepers were Michigan Central and Pullman equipment, respectively. This train was due to arrive at Porter at 6:16 p. m. and was running a few minutes late at the time of the accident. The schedule time of this train is 50 miles an hour between Hammond, Ind., and Michigan City. The schedule running time of the New York Central train between La Porte, Ind., and Englewood (Chicago), Ill., is 41 miles an hour.

At the point of the accident the Michigan Central tracks run almost due east and west. About 1,000 ft. west of the crossing there is a curve to the north of about 1 degree, after which the track is again tangent, while east of the crossing the track is tangent for some distance. The New York Central tracks at this point are tangent. The interlocking at this place is a mechanical plant equipped with electric route locking and approach indicators on both railroads and is

maintained by the New York Central. After the accident the levers in the machine were found in the proper position to give the New York Central train the route over the plant.

The preliminary investigation indicated that the engineman of the Michigan Central train ran past the eastbound home signal in the stop position and through the open derail. The train then ran on the ties for a distance of 300 ft., when the engine was rerailed on the crossing diamond, continuing across the crossing to a point where the day coach, Canadian Pacific 1560, the third in the train, was on the crossing of the westbound New York Central main when the New York Central train crashed into it. It was in this coach, which was of wooden construction, that the heaviest loss of life occurred. The impact of the New York Central engine was so great that the day coach was reduced to a mass of splinters, part of the wreckage breaking out the windows on the

Photo by International

The New York Central Locomotive and Splinters of Demolished Cars

south side of the interlocking tower as well as the siding in some places. One peculiarity of the accident was that those killed were mostly decapitated, and a number were mutilated so badly that identification was difficult. After the New York Central engine plowed through the day coach it left the track near the northwest corner of the tower and plowed into the ground, which was level at this point, digging a hole about 10 ft. deep. The momentum was so great that the engine and tender were turned completely around and over on their sides upon the wye connection between the New York Central and Michigan Central tracks, breaking and twisting the rails. The engineman and fireman of the New York Central train were killed and many of the passengers in the Michigan Central day coach were buried under the engine and tender. In this coach were between 60 and 80 passengers, many of whom were railroad employees returning to Michigan City, Ind., and Niles, Mich., after spending Sunday in Chicago.

An examination of the stock rail at the eastbound derail on the Michigan Central indicated that the top had rolled slightly and at the point where the wheels dropped to the ties the lower corner of the head was sheared. From this point for a distance of about 800 ft. the ties in this track were reduced to pulp. The crossing frogs were skewed, the lugs on several being broken and it was necessary to replace four of them.

After the accident Engineman Long of the wrecked Michigan Central train was reported as saying: "My fireman, Block, first sighted the signal that meant a clear track and called my attention to it. We were running at full speed and did not slow down when we were certain the signal was right. Proof that we were not to blame for the wreck is seen from the fact that the engine and one coach passed the derail. I will not state what I believe caused the wreck. The derail was locked and I could not be to blame."

Joseph Cook, the leverman on duty at the interlocking plant at the time of the accident, declared after the accident that Engineman Long ran by the home signal. The New Central train had been given the route, as its approach was announced first by the indicator in the tower. In his statement he said, "Under normal conditions the block is set against all trains. The train hitting the buzzer first is then given the right of way. * * *

"That is exactly what happened when the buzzer sounded yesterday. It showed that the New York Central train was the first to hit the buzzer by almost a full minute ahead of the Michigan Central flyer.

"I released the block which permitted the New York Central train to go through. Just as the train hit the crossing I saw the Michigan Central train coming around the curve at 60 miles an hour. I saw right away what was going to happen and thought the tower would be demolished. I called to Charlie Whitehead, the telegraph operator in the tower with me, and made for the steps which lead to the ground. The Michigan Central train by this time had hit the derail, which clearly showed that the block had been set against it and plowed over the ties and track, tearing them up as it went across the New York Central track. When the third coach of the Michigan Central train passed over

Photo by International

The Scene of the Collision at Porter, Ind., Showing the New York Central Locomotive

the New York Central right of way the New York Central train cut through it. As the locomotive of the New York Central train passed over the track it toppled over and the coaches of both trains were scattered in all directions.

"I cannot understand how the engineman of the Michigan Central train could have proceeded against the two blocks which were set against him. I can't help but feel that the engineman must have been asleep, for there are two blocks which are visible for almost a mile and half before he reached the crossing. I heard later that his fireman had admitted that the engineman disregarded the block. Investigation of the scene of the accident will show that the Michigan Central train hit the derail and the plowing up of the ties is conclusive proof that the blocks were correctly set."

In a statement issued by General Manager Henry Shearer of the New York Central at Chicago, it was said that "at

6:23 p. m., February 27, Michigan Central passenger train No. 20, engine No. 8306, ran past the eastbound home signal at Porter (Norwood), Ind., interlocking plant 40 miles east of Chicago, striking the open derail, derailing its engine and entire train. The train kept on going on the ties and the engine jumped back on the track at the crossing. The engine, baggage car and smoker of the Michigan Central train had gotten over the crossing and as the day coach, Canadian Pacific No. 1560, the third car, was on the crossing, New York Central train No. 151 struck the Canadian Pacific coach, demolishing it, derailing and turning over the New York Central engine and derailing four cars behind the New York Central engine."

On Monday morning, February 28, a preliminary investigation of the accident was held at Michigan City, Ind., by officers of the Michigan Central and the New York Central. Representatives of the Indiana State Railway Commission have also started an investigation, as have representatives of the Interstate Commerce Commission.

Henry Shearer, general manager of the Michigan Central, on Tuesday issued the following statement:

"In the matter of the unfortunate collision at the crossing of the New York Central and Michigan Central at Porter, Ind., on February 27, after careful investigation of the facts with all interested employees and conference with officials just completed, it has been determined that engineer W. S. Long and fireman George F. Block, on engine No. 8306, train No. 20, violated rules and regulations in failing to observe and properly obey signal indications, and will be forthwith dismissed from the service."

Automatic Train Stop Committee

The Bureau of Safety of the Interstate Commerce Commission, and the special committee of the American Railway Association, which meet in joint session every month to discuss automatic train stops, have decided that the definitions of the functions of and requisites for installation of automatic train control systems need not be perfected to the last degree before some actual forward step may be taken. At a meeting on February 15 they embodied in a progress report the following paragraph:

"The functions to be accomplished and the specifications and requirements to which a device to be installed in any designated location must conform will of necessity be determined by traffic, operating and other local conditions and can be prescribed in detail only when the specific location for an installation has been designated. In connection with the test installations now in contemplation, it may be necessary to establish specifications and requirements merely tentative at the outset and subject to modification and development as the work progresses. Such specifications and requirements for several test installations, together with records of alterations in the installations which may become necessary in the course of the tests, should furnish data from which the commission may ultimately prepare specifications and requirements to be prescribed in accordance with the terms of the law."

Preliminary to this, the committees, quoting the definition of automatic train control (paragraph 1) adopted the clauses below (paragraphs 2 and 3).

1. *Definition* (Adopted by A. R. A., May, 1914).

   An installation so arranged that its operation will automatically result in either one or the other or both of the following conditions:

   First—The application of the brakes until the train has been brought to a stop.

   Second—The application of the brakes when the speed of the train exceeds a prescribed rate and continued until the speed has been reduced to a predetermined rate.

2. *Functions.*

   The primary function of an automatic train control system is to enforce obedience to the indications of fixed signals. The following features may be included, separately or in combination, in automatic train control systems:

   1. *Automatic stop.*
      (a) Without manual control by engineman; requiring train to be stopped, after which apparatus may be restored to normal condition manually and train permitted to proceed.
      (b) Under control of engineman, who may, if alert, forestall automatic brake application and proceed.
   2. *Automatic speed control.*
      (a) Automatic stop, after which train may proceed under low-speed restriction until the system is automatically restored to normal or clear condition by reason of the removal of the condition which caused the stop operation.
      (b) Low-speed restriction, automatic brake application being under control of engineman who may, if alert, forestall application at a stop indication point or when entering a danger zone and proceed under the prescribed speed limit, until the system is automatically restored to normal or clear condition by reason of the removal of the condition which caused the low-speed restriction.
      (c) Medium-speed restriction, requiring the speed of a train to be below a prescribed rate when passing a caution signal or when approaching a stop signal or a danger zone in order to forestall an automatic brake application.
      (d) Maximum-speed restriction, providing for an automatic brake application if the prescribed maximum speed limit is exceeded at any point.

3. The following general requirements applicable to automatic train control devices may be stated:

   1. An automatic stop device shall be effective when the signal controlling it indicates stop, and so far as possible when that signal fails to indicate existing danger conditions.
   2. An automatic speed control device shall be effective when the train is not being properly controlled by the engineman.
   3. An automatic train control device shall be operative braking distance from the signal location if signals are not overlapped, or at the signal location if an adequate overlap is provided.

New York Commission on Automatic Train Control

The joint committee appointed last August, pursuant to a request of the New York Central Railroad Company, following a recommendation by the Public Service Commission, Second District, that the company consider the installation of an automatic train control device, on March 1 submitted its report. The committee consisted of Public Service Commissioner George R. Van Namee, chairman; C. R. Vanneman, chief of the Division of Railroads, and James J. Gill, inspector of equipment, for the commission; and W. H. Elliott, signal engineer; H. S. Balliet, assistant terminal manager, and T. L. Burton, air brake engineer, for the railroad com-

pany. Numerous plans and devices have been examined and the committee reports to the commission as its conclusions:

1. That only devices employing the induction means of actuating the locomotive apparatus should be installed.
2. That no device now available has been developed to a point warranting installation without a preliminary test on a short section with one locomotive equipped.
3. That of the devices examined, those of the following proprietors may be tried in active service with the minimum of preliminary test; George P. Finnigan, the General Signal Company and the Sprague Safety Control & Signal Corporation provided that a modification of the present practice of snow flanging is made.
4. That a two-block or three-block section of track 4 immediately west of Signal Station 9, between Schenectady and Hoffmans, on the Mohawk division is a desirable place in which to make a test of a train control device.

This report is signed by the members appointed by the Public Service Commission, the members appointed by the railroad having withheld their signatures on account of a request having been received by the railroad company, from the joint committee of the American Railway Association, that the Sprague device be tested on its railroad; and, further, because these members felt that there should be co-operation btween the Public Service Commission committee and that of the American Railway Association before a report is rendered. The members appointed by the commission, however, are of the opinion that the committee has completed the work for which it was appointed and that therefore the report should be submitted to the commission.

The commission at once considered the report in executive session and issued an order to the New York Central to show cause on Thursday, March 10, why it should not immediately install one of the devices suggested in the report, and conduct investigations of its feasibility under actual operating conditions.

New Passenger Terminal for Cleveland Planned

The New York Central has filed with the Interstate Commerce Commission an application for authority and for a certificate of public convenience evidencing the Commission's approval for the construction of a union passenger station in Cleveland, Ohio, for the use of the New York Central, the Cleveland, Cincinnati, Chicago & St. Louis and the New York, Chicago & St. Louis.

Plans have been under consideration for several years, for the construction of a passenger terminal on the lakefront, to accommodate the New York Central, the Big Four and the Pennsylvania which use the present union station at Cleveland. It has become apparent, however, that the future growth of Cleveland industrially, as well as in population, may be better provided for with a passenger terminal of sufficient size to accommodate all of the railroads, located so as to be free from interference by operations connected with necessary service to industrial plants.

On January 6, 1919, the city of Cleveland passed an ordinance containing provisions for the location of a passenger station on the Public Square and for necessary changes in streets for the station and approach tracks. The New York Central, the Big Four and the Nickel Plate have now filed applications with the Interstate Commerce Commission asking for permission to enter into a contract with the Cleveland Union Terminals Company for the construction and operation of such a passenger terminal, in order that there may be ample time for complying with all of the legal provisions necessary for the financing, which should be undertaken as soon as the time is opportune.

A substantial portion of the passenger terminal will be devoted to the operation of suburban and interurban railways, which will add distinctly to the terminal's usefulness and convenience to the public.

The plan proposes the purchase by the railroads of the entire capital stock of the Cleveland Union Terminals Company, in proportion of 64 per cent by the New York Central, 28 per cent by the Big Four and 8 per cent by the Nickel Plate, this being the relative proportion of passenger business handled by the respective railroads in Cleveland. The Cleveland Union Terminal Company is organized under the Union Depot Act of Ohio and is to construct the station pursuant to the provisions of the ordinance of the city of Cleveland, adopted to permit the project, which ordinance provided that it should become a contract upon its acceptance by the Terminal Company.

While the present plans contemplate the use of the new terminal by the New York Central, the Big Four and the Nickel Plate, the station is so located as to be readily accessible for all the other steam railroads entering Cleveland and the contracts provide that any or all the other roads may enter the station in the future if they desire, upon terms to be agreed upon. Electrification is provided for between the passenger station and the points for changing power exterior to the terminal limits.

The present passenger station on the lakefront was constructed fifty-five years ago and its location below the general level of the city, hemmed in by bluffs and other obstacles, has prevented adequate improvement as well as restricted its accessibility to the public. In 1918 President A. H. Smith of the New York Central, in his capacity as then Eastern Regional Director of the Railroad Administration, appointed a joint committee representing all seven railroads entering Cleveland to consider the union station problem. This committee reported and the city of Cleveland enacted an ordinance to permit the construction with the proviso that its terms should be accepted within a given period, but due to the non-acceptance by certain of the roads, the ordinance was subsequently amended to provide that the project might be accepted by at least two of the three railroads on the lakefront, and this resulted in the present agreement and application for permission to proceed.

The length of the passenger terminal, which includes the passenger station and its approaches, is to be about three and a half miles. The general plans, as filed with the Interstate Commerce Commission with contracts and agreements, provide that the station initially shall cover approximately twenty acres, with property available to add an additional ten acres in the final improvement. Initially, there will be fourteen miles of trackage, with provision for the addition of ten miles more for use of the steam railroads. For use of the suburban and interurban lines, there are to be nine and a half miles initially and space for eight and a half additional miles.

The Union Terminal track and platform layout will be 30 feet below the level of the Public Square, with a service floor for waiting rooms, ticket offices, etc., ten feet below level of the street and connected therewith by ramps. The railroad terminal facilities will be surmounted by an office building twelve stories in height and a tower extending upward twenty stories. In order to distribute pedestrian traffic, the terminal plans provide for entrance and exits to streets on four sides, the main access opening directly upon the Public Square.

A Bill increasing the personnel of the Wisconsin Railroad Commission from three to five, and providing that at least one of the commissioners be a woman, was introduced in the Legislature on February 16.

Proposed Hill Line Financing Plan Disapproved

Interstate Commerce Commission Authorizes Capitalization of Surplus by Stock Issue But Objects to Use of Bonds

WASHINGTON, D. C.

THE PLAN of financing proposed by the Chicago, Burlington & Quincy for the purpose of assisting the Great Northern and Northern Pacific to meet the maturity on July 1 of the $215,000,000 of joint 4 per cent bonds issued against their Burlington stock by capitalizing part of its surplus, was disapproved by a majority of the Interstate Commerce Commission on February 28. The commission granted authority to the Burlington to issue $60,000,000 of additional capital stock as a stock dividend and made no objection to the capitalization of surplus as such, but it denied authority to issue $109,000,000 of first and refunding mortgage 6 per cent bonds, of which $80,000,000, or the proceeds, were to be used as a dividend to enable the two northern companies to reduce their joint bond issue by the amount of their share of the dividend in order that the balance of about $140,000,000 might be refunded at a lower rate of interest than could be obtained for an issue of the full amount.

Eight of the nine members of the commission offered no objection to the idea of capitalizing extensions and improvements paid for out of surplus earnings, but a majority of five objected to the idea of issuing interest-bearing securities for that purpose.

The commission answered the principal objection advanced against the plan by saying that there is no proof that the Burlington surplus income is the result of excessive rates, and it said that "no one questions the right of owners to compensation for sacrifices made in foregoing dividends," but the denial was extended to the proposed bond issue, which the report refers to as a "bond dividend," which would materially increase the company's fixed charges for 50 years by a railroad which itself "has no need for the bonds and which can advantageously issue all the stock reasonably required for its needs." "Division of that part of the surplus not needed for ordinary surplus purposes by means of stock appears more in accord with applicant's and the public's welfare," the commission said.

According to the statements made by the representatives of the Hill lines at the hearings, the proposed stock issue was intended primarily to afford a broader base for bond issues and would be practically valueless to the stockholders because it was proposed to reduce the dividend rate from 8 per cent to probably 6 per cent. It was stated that the bond issue was proposed instead of a stock issue as a less expensive means of financing, because the stock could not be sold at par. The commision's report suggests that the refunding of the joint bonds could be accomplished at a reasonable rate by the issuance of bonds of the Great Northern and Northern Pacific secured by mortgage and the pledge of Burlington stock.

The commission was very much divided in opinion on the questions raised by the Burlington application. Concurring opinions were written by Chairman Clark and Commissioner Potter and dissenting opinions by Commissioners Daniels and Ford, protesting against the refusal to authorize the proposed bond issue, while Commissioner Eastman in a dissenting opinion objected because the stock dividend had not also been denied. Commissioner McChord also wrote a separate concurring opinion agreeing fully with the majority report. The majority opinion, therefore, apparently represents the views of Commissioners Meyer, Aitchison, Hall and McChord, with the partial concurrence of Commissioners Clark and Potter, the vote of whom was necessary in order to get a majority vote for even the stock issue. Eight members of the commission, or all except Mr. Eastman, therefore, approved the stock issue but only four approved both the bond and stock issues. Commissioner Daniels describes the permission which is granted as "largely ineffectual" and the denial as "essentially technical or formal."

The hearing on the Burlington's application was held before the director of the commission's Bureau of Finance in December and the early part of January and the case was referred to Division 4, consisting of Commissioners Meyer, Potter, Daniels and Eastman. Commissioner Eastman's dissent put the case before the full commission and an oral argument on the Burlington application and that of the Delaware, Lackawanna & Western to issue a stock dividend covering its surplus was held before the full commission on February 14 and 15. It was announced at the office of the secretary of the commission on Saturday afternoon that the commissioners were in conference and that the decision would be given out about 5 o'clock, but at 5:30 it was stated that the decision would be postponed and another conference was held on Monday.

An abstract of the majority and of the separate concurring and dissenting opinions follows:

Report of the Commission

The Chicago, Burlington & Quincy Railroad Company seeks approval under section 20a of the interstate commerce act of its first and refunding mortgage and authority to issue $60,000,000 par amount of capital stock and $109,000,000 principal amount of first and refunding mortgage bonds. No objection to the granting of the application was made directly by any state authority other than the Nebraska State Railway Commission. The Northern Pacific Railway and Great Northern Railway appeared in support of the application.

Applicant is an Illinois corporation and the railroads incorporated in other states which it now operates have been conveyed to it in fee simple. In 1901 the Great Northern Railway and the Northern Pacific Railway jointly acquired control of applicant's system by the purchase of $108,000,000 or 96.79 per cent of its capital stock, giving in payment therefor their joint 4 per cent bonds maturing in 1921 and pledging the stock acquired as collateral security.

Applicant has outstanding $110,839,100 par amount of capital stock and $174,040,800 principal amount of bonds, of which $168,050,000 is in the hands of the public. The greater part of its funded debt is issued under three mortgages.

Its Nebraska extension mortgage is a lien upon 269 miles of road, and is secured by deposit of $23,494,000 of first mortgage bonds on 1,202 additional miles of subsidiary companies which have conveyed their roads to applicant. There have been issued thereunder to reimburse the treasury for expenditures for extensions of lines $29,441,000 of 4 per cent bonds maturing in 1927, sold at prices ranging from 84.5 to 95.12, netting applicant $26,843,383. Discounts thereon of $2,597,617 were charged to construction. Of these bonds $20,024,000 are outstanding, $18,294,000 in the hands of the public and $1,730,000 in applicant's treasury.

Applicant's Illinois division mortgage covers 1,646 miles of road. There have been issued thereunder $85,000,000 in bonds maturing in 1949, $56,000,000 to be used to retire prior bond issues, the remainder to reimburse the treasury, $15,000,000 being for expenditures for construction and acquisition of roads before July 1, 1899, and $14,000,000 being for additions and betterments subsequent to that date. Some $50,835,000 of these bonds bearing interest at 3.5 per cent were sold at prices ranging from 75 to 103.5, netting applicant $45,992,235. Discounts thereon of $1,088,975 were charged to construction and of $3,753,790 to profit and loss. Some $34,165,000 of 4 per cent bonds were sold at from 98.5 to 104.5, netting $35,228,505. Discounts thereon of $9,880 were charged to construction and $1,073,385 of premiums were credited to profit and loss. Of the 3.5 per cent bonds $384,000 and of the 4 per cent $189,000 are in applicant's treasury. The balance of both issues are in the hands of the public.

A general mortgage maturing in 1958 covers substantially all of applicant's railway property existing in 1908, being a first lien on more than 5,000 miles of road. It is so limited that not over $300,000,000 can be outstanding thereunder at any one time, and that bonds cannot bear over 5 per cent interest. There have been issued thereunder and are outstanding $65,247,000 of 4 per cent bonds which were sold at

from 91.5 to 100, netting applicant $62,444,450. Discounts thereon of $2,602,550 are being amortized from income during the life of the bonds. Before the passage of the transportation act, 1920, the Public Utilities Commission of Illinois authorized the issuance of $121,378,000 of general mortgage 4 per cent bonds; of this amount $2,252,000 have been issued, leaving $119,126,000, of which $9,873,000 are in applicant's treasury and $109,253,000 remain unexecuted.

The investment in road and equipment, as shown in applicant's accounts is $503,745,838. Its outstanding securities amount to $284,879,900, leaving a book surplus of $218,865,937. Applicant contends that it has an actual surplus materially in excess of that figure which does not take into account investments in property other than road and equipment, and does not include any sum in consideration of its guaranty under section 209 of the transportation act, 1920. It asserts that the value of its physical property upon the basis provided in section 19a of the interstate commerce act amounts to $572,800,000, or about $70,000,000 more than the total shown as investment in road and equipment. Depreciation on its equipment has been charged to the amount of $48,514,240. Applicant states that since July 1, 1901, it has invested out of earnings $189,070,776 in additions and betterments to its property, only a small portion of which was expended for non-revenue producing assets; that it has in addition used earnings to retire bonds, expending a total of $191,348,478, properly chargeable to capital account, no part of which has been capitalized. During that time applicant has increased its mileage from 7,600 to 8,900 miles. The total mileage owned and operated has increased from 7,700 to 9,300 miles. Second track has been increased from 425 to 1,000 miles and yard track and sidings from 1,700 to 3,200 miles. The tons of traffic handled have increased from 17,000,000 to 49,000,000; the ton miles from 3,800,000,000 to 14,000,000,000; the density ton miles per mile of line from 582,000 to 1,483,000; the trainload from 200.43 to 722.19 tons; the carload from 12.5 to 26.5 tons. Applicant has during this time reduced its funded debt and now has securities in the hands of the public totaling $31,164 per mile of road.

Objectors do not deny the existence of property value used and useful in rendering the public service materially in excess of applicant's present capitalization, and do not question the nature of the expenditures involved. They question the right of a public service corporation to declare dividends from invested surplus acquired from earnings during a period when the stockholders were receiving regularly a fair dividend upon the outstanding capital.

Applicant's net income applicable to dividends for the past 10.5 years has been as follows:

1910	$13,308,746
1911	16,843,763
1912	14,106,754
1913	19,430,746
1914	17,114,407
1915	17,288,913
1916*	43,878,845
1917	28,009,002
1918	15,947,881
1919	16,561,229
Total 10.5 years	$202,490,286
Average per year	$19,284,789

*18 months' period due to change in report year.

Notwithstanding this large net income available for distribution among the stockholders the average of all dividends paid from 1901 to 1920 was 8.51 per cent upon the abnormally low capitalization and 3.916 per cent upon the average property investment in excess of all outstanding bonds.

Income Not the Result of Excessive Rates

There is no proof that this income is the result of excessive rates. Traffic has been carried by applicant at rates controlled by state or interstate regulatory bodies, substantially the same as those applicable over competing lines. Nor is there any proof that the total return upon the fair value of applicant's property has been excessive. Applicant's right to capitalize $119,000,000 of the surplus has in fact been recognized by the public utilities commission of Illinois, the state of its incorporation, under express statutory provision. A five-year statutory limitation prevented that body from considering surplus accumulated during an earlier period.

Applicant points out that its present financial structure is inadequate for present and future needs. Its Nebraska extension and Illinois division mortgages are closed, and its general mortgage so limited that its use is impractical under present conditions. The execution of a new mortgage subject to these existing liens would be futile. Applicant now proposes to close the general mortgage without issuing further bonds under it, and to execute a 50-year first and refunding mortgage to secure coupon bonds to be issued in series at interest rates, and redeemable at times, and on terms, to be determined by the directors at the date of issuance, subject to our approval.

Applicant points out that bonds under its general mortgage could not bear more than 5 per cent interest and if they could be marketed at all would have to be sold at heavy discount, and that they would not be redeemable before 1958. It is shown that the amount of bonds issuable under that mortgage would not meet applicant's needs for additions and betterments at the current rate beyond 1933, and if the proposed dividend were paid would not meet requirements beyond 1929. It is contended that the proposed financial program would better applicant's credit and strengthen its position.

Authority is sought to issue $109,000,000 of first and refunding mortgage bonds at 6 per cent, $29,000,000 thereof to be used for future additions and betterments subject to our approval, $80,000,000 thereof to be held free in applicant's treasury for any lawful use including issuance as dividends. It appears that they would be used solely for dividend purposes and if authorized would be distributed among the stockholders.

Applicant calls attention to the necessity of refunding on July 1, 1921, $215,227,000 of its controlling road's joint 4 per cent bonds given in payment for its stock, and points out that practically all of its proposed bond issue, if authorized, would be available to those roads for use in meeting that obligation, thus materially reducing their fixed charges. It points out that as the controlling roads are its principal stockholders it is their foregoing of dividends which has produced its invested surplus. It contends that its own increase in fixed charges would be offset by the material advantage resulting to its established connections. It shows that the proposed financing would slightly reduce its ratio of bonds to stock, placing it substantially upon the basis of 1.5 to 1, and would not so increase fixed charges as to impair applicant's ability to serve the public.

Objectors contend that applicant should not be permitted to increase its fixed charges without a showing of resulting benefit to applicant. The issuance of the proposed bonds at this time would materially increase applicant's interest burden without apparent necessity. The interest rate at the time of the above-mentioned expenditures from surplus was not in excess of 4 per cent. Authorization of bonds at that rate at the present time would seem inexpedient. Division of that part of the surplus not needed for ordinary surplus purposes by means of stock appears more in accord with applicant's and the public's welfare.

Both the wisdom and legality of the joint acquisition and ownership of the Burlington by the Great Northern and the Northern Pacific are questions foreign to this proceeding and therefore require no consideration on this occasion.

While we do not minimize the advantages derived by applicant from its connections with the northern lines we are not convinced that the continuance of those connections is dependent upon the issuance of the proposed bond dividend. The general advantages of minimizing fixed charges in refunding the joint fours are apparent, but we cannot share applicant's apprehensions relative thereto. The northern lines enjoy a position relatively favorable to financing such a refunding. The value back of applicant's stock renders it desirable collateral security. No evidence has been introduced which convinces us that the refunding could not be accomplished at a reasonable rate by the issuance of bonds of the Great Northern and Northern Pacific secured by mortgage and the pledge of applicant's stock.

Confusion has been injected into this case by the failure to distinguish between the issuance of bonds to reimburse the treasury from the proceeds thereof for expenditures for additions and betterments, and the issuance of bonds from invested surplus for dividend purposes. We cannot accept applicant's argument which finds in the Illinois commission's approval of the issuance of 4 per cent or 5 per cent bonds to reimburse applicant's treasury for expenditures for additions and betterments, a sanction of a dividend of 6 per cent bonds. It is true that body's authorizations contained no express prohibitions against such a dividend, but each of its orders provided that the bonds should be sold and a majority of the orders specified sale for cash; all required that the proceeds be applied to specified purposes. One order made optional the pledge of the bonds. The Illinois statute enumerated the purposes for which a public service company might issue securities without including the issuance of dividends, and expressly stated that securities might be issued for no other purposes. Nor is it certain that the question before the Illinois commission was wholly analogous to that here presented, for the approval of a bond issue during a normal period differs materially from approval of an issue at an abnormal rate at an abnormal time when the only material advantage anticipated inures to parties other than the applicant.

Applicant seeks authority to issue $60,000,000 additional capital stock as a necessary basis for the proposed mortgage, under which the aggregate amount of such bonds cannot exceed three times the outstanding capital stock. It is proposed to issue such stock as a dividend.

If applicant's petition is granted in full it is urged that there will remain a corporate surplus of $101,781,197; that this amount would be adequate to meet applicant's emergency needs, support its borrowing power, afford insurance against obsolescence, minimize short term financing, and serve as a general financial balance wheel. Allowance should be made, however, pending the valuation of applicant's system, for shrinkage of book values, so that the adjusted capitalization will not leave applicant with an inadequate actual surplus.

Present Capitalization Below Actual Investment

The evidence establishes (1) that the Chicago, Burlington & Quincy Railroad has a great uncapitalized surplus; (2) that the present capitalization is far below the actual investment or any fair value for rate-making purposes which we may subsequently fix under the Valuation Act, section 19a of the Interstate Commerce Act; (3) that the increase in capitalization which would follow the grant of this authority would still leave the total capitalization of the Burlington below the actual investment and the probable fair value of the property devoted to the public service; (4) that the remaining uncapitalized surplus would be sufficient to serve the purposes for which a surplus should be accumulated, and (5) that the present financial structure of the Burlington is obsolete and inadequate and that a new form of mortgage and a larger stock base to meet the requirements of statutes governing investments by savings institutions in various states are necessary.

We find that the proposed issue of $60,000,000 capital stock by the Chicago, Burlington & Quincy Railroad Company as a dividend (a) is for a lawful object within its corporate purpose, and compatible with the public interest, which is necessary, appropriate for, and consistent with the proper performance by it of service to the public as a common carrier, and which will not impair its ability to perform that service, and (b) is reasonably necessary and appropriate for such purpose; but that applicant has not justified an authorization of the issuance as dividends of mortgage bonds against its surplus and that authority therefor should be denied. If applicant desires, we shall give consideration on the present record to an application to issue bonds for appropriate purposes other than dividends.

The question of a proper return on the fair value of property devoted to the public use is not pertinent. It is not before us. No one questions the right of owners to compensation for sacrifices made in foregoing dividends. The denial in this case extends only to the issuance of a bond dividend by a railroad which has no need for the bonds, and which can advantageously issue all the stock reasonably required for its needs. The more adaptable form of mortgage which the applicant desires can be provided without the issuance of a bond dividend.

An appropriate order will be entered.

Chairman Clark Would Approve Bond Issue Also

CLARK, Chairman, concurring:

I concur fully in the approval of the issuance of $60,000,000 of capital stock. I do not find myself in accord with the refusal to authorize $80,000,000 of bonds. I regard the case as

unique, and, therefore, as one that should not be decided upon the idea that it establishes a general precedent or a general policy. The Burlington has an abnormally low capitalization and an abnormal surplus from income that has been spent upon the property. That surplus has been accumulated under rates fixed by state and federal regulating bodies. Competing carriers, under the same rates, have not accumulated similar surpluses. The Northern Pacific and the Great Northern own 97 per cent of the stock of the Burlington, and have so owned it for some 20 years. They must refund their obligations, assumed in acquiring that stock.

Looking at the situation in its general aspects, and from the standpoint fixed in the present law of considering and dealing with the railroads in a national sense or in large groups, it would seem that the main question is what will be the effect upon the public interest. The northern lines must pay these joint collateral bonds or make good any deficit from surrender of the collateral. Forfeit of that collateral would, as it seems to me, cause the placing upon these lines an additional burden as a net loss, to be borne by the public. Obviously these owning lines will not choose that course. The debt, which I regard as well secured, must be met. Is it more to the public interest that it shall be done by retaining this $80,000,000 in the Burlington's surplus, which admittedly will be large enough for all reasonable purposes if the $80,000,000 is disbursed, and adding a like sum to the capitalization of the owning lines, with substantially larger fixed charges, than to consider the three systems as a family and permit the owning lines to have the benefit of that much of the surplus of the Burlington which is not needed by it? The total bonded indebtedness of the three systems would not be substantially different in either event. It seems certain that under any plan that is left open for refunding this debt the fixed charges will be much greater for a long term of years than they would be if the $80,000,000 of bonds were made available for the sole purpose of reducing the principal amount of the debt about to become due.

McChord Agrees With Majority Report

McChord, Commissioner, concurring:

Agreeing fully with the majority report, I wish to state briefly certain other considerations which lend support to my concurrence in the conclusions reached. When all is said and done, the submitted justification for the course proposed is that, as against an available interest rate of 6 per cent for Burlington bonds, funds obtained by the Great Northern and Northern Pacific upon their own securities probably would cost them 8 per cent. This purely speculative apprehension does not justify itself to my mind. The now outstanding bonds of those lines are in a large measure collaterally secured by capital stock of the Burlington, and the credit of that company would equally become the foundation of an issue of its own bonds or of refunding issues of the Great Northern and Northern Pacific collaterally secured by an equivalent dividend issue of Burlington capital stock. Indeed, the total pledged security would be ampler, in the ratio of the accumulated surplus, than that by which the now maturing bonds were originally supported.

It does not appear that the two lines most concerned, as they might and should have done, have laid before the interests from whom the requisite financial assistance is to be obtained the merits of refunding issues of bonds of those lines and the enhanced value of the securities they would have to offer. If when this were done the financial interests were nevertheless to take advantage of the necessities of those carriers and demand a prohibitive rate of interest, which is hard to believe, these interests must bear their share of the responsibility for the impairment of the carrier's transportation functions. The present transportation and industrial situation calls for moderation and forbearance, and there can be no condoning an abuse of opportunity which can only tend to block a downward trend of prices so essential to the mutual welfare of carriers and shippers.

The assertion that if this application is denied the outstanding 4 per cent bonds cannot be refunded at less than 8 per cent, is startling. If the financial institutions of the country have determined to increase the interest rate on such bonds 100 per cent, and it is accomplished, our railroads cannot weather the storm. Good business judgment on the part of the Great Northern and Northern Pacific would dictate the submission to the present bondholders of an offer of 6 per cent refunding bonds, representing an increase of 50 per cent in earning power and resting upon a materially enlarged basis of security.

An approval of the proposed application and the devotion of approximately 98 per cent of the proposed bond issue to the retirement of the maturing Great Northern and Northern Pacific bonds would virtually weld into one inseparable system, for the life of the bonds, the three trunk lines, although it is by no means certain at this time that such a merger would suit the purposes of amended section 5 of the act. For other reasons, we should proceed with particular care in these financial matters, especially in these critical times and until the trend of events is definitely determined.

Potter Finds Bond Issue in Public Interest

Potter, Commissioner, concurring:

I concur in that part of the majority report which authorizes the issuance of $60,000,000 of stock, but do not concur in the view that permission to issue $80,000,000 of bonds should be denied. The withholding of permission to issue the bonds under the circumstances as they are presented, is, to my mind, hostile to the public interest.

The issuance of bonds to reimburse the treasury of a carrier and replace income used for additions and betterments not only is lawful, but has the sanction of established practice and general public and official approval. When carriers have in their income account surplus funds not needed, they have the right to distribute that surplus among their stockholders, and the control of such distribution is not within our jurisdiction. The question presented by the situation before us is whether the issuance of bonds to reimburse the treasury is proper, coupled as it is with the proposed distribution among the shareholders of the restored income. The importance which existing conditions attach to this question is obvious. It is not a good time to issue securities carrying the present high interest rates. If, however, securities must be issued, they should be issued so as to take advantage of the lowest available rate. A basis that is high is preferable to another basis that is still higher. The real question which is involved in the existing situation is whether permission to put out securities on one basis should be denied when because of that denial we will have to authorize the issue of securities on another and higher interest basis.

The investing public now holds the bonds of the Northern companies maturing July 1, 1921, in the aggregate amount of $215,000,000. The record made upon the public hearing before us when all interests were represented supports the conclusion that the plan proposed will accomplish a reduction of the interest burden upon the three properties considered together, substantially below the best basis available under any other plan. The Northern companies as Burlington stockholders naturally consent to the proposed bond issue and distribution. It does not appear that the minority of Burlington stockholders in any way will be injured thereby. We are to consider the question of public interest. Courts applying the law will attend to any question as to relative rights of shareholders. The comparatively favorable interest basis which the proposed plan affords serves the public interest in an important way. By reducing the aggregate interest burden of the three companies, their net income will be increased, the drains upon their earnings will be reduced, their aggregate strength and credit will be improved, and they will be enabled better to serve the public. A plan which facilitates the lowering of the basis upon which a large financial undertaking is handled should naturally have a tendency to improve the general credit situation in which carriers and shippers have a vital interest. This consideration will apply particularly to the carriers in the Northwestern group.

We should deal with the substance of things. The ownership of approximately 97 per cent of the Burlington stock by the Northern companies justifies treating the Burlington company as an instrumentality through which its properties are owned by the Northern companies—if this may be done in justice to the minority of Burlington stockholders, and it may for the purposes of this application be so treated in justice to them. The stockholders of the Northern companies are the persons vitally interested in the situation before us. They own practically all of the assets of the Burlington company in the same way they own the assets of the Northern companies. They must finance $215,000,000 on July 1. It is natural and right for them to feel that if they can make a saving by using their Burlington security in part instead of relying entirely upon the property of their Northern companies, they should be permitted to do so, when to do so is, as in this case, consistent with the public interest and the interest of the Burlington minority shareholders.

Daniels Says Permission Granted Is Largely Ineffectual

Daniels, Commissioner, dissenting:

The chief objection to the majority report goes not to what the report grants, but to the far more vital permission which it withholds. It concedes the propriety of capitalizing surplus to the amount of $60,000,000 in stock, the effect of which is remote, while it denies the propriety of capitalizing surplus to the amount of $80,000,000 in bonds, the beneficial effect of which would be immediate. It allows a stock dividend which will be available as a stock base for bond issues in future, and denies a bond issue which will effect substantial economies in refunding at present. It provides for the future financing of the Burlington, while it disallows the means proposed for financing the current and pressing exigencies of the Burlington's proprietors. The permission granted therefore seems to me to be largely ineffectual.

The majority report evidently attaches no conclusive weight to the objection most seriously urged before us against the proposed capitalization of the Burlington's surplus—that a public service corporation has no right to declare dividends from invested surplus acquired from earnings during a period when the stockholders were receiving regularly a fair dividend upon the outstanding capital stock. It properly points out that "the average of all dividends paid from 1901 to 1920, was 8.5 per cent upon the abnormally low capitalization, and 3.916 per cent upon the average property investment in excess of bonds." It declares correctly that "there is no proof that this income is the result of excessive rates." It calls attention to the fact that "applicant's right to capitalize $129,000,000 of the surplus has in fact been recognized by the public utilities commission of Illinois, the state of its incorporation"—all of which, it may be added, was in the form of bonds, not stock.

The majority report therefore affirms the lawfulness of this stock dividend as against uncapitalized surplus derived from earnings under reasonable rates and reinvested in property permanently devoted to the service of the public. The proposed dividend against the surplus, if the dividend took the form of bonds, is not denied by the majority report on the ground that such a dividend would not be for some lawful object within the applicant's corporate purposes, or otherwise in conformity to the requirements of paragraph (2) of section 20a of the interstate commerce act. The denial is mainly based on the finding that "the applicant should not be permitted to increase its fixed charges without a showing of resulting benefit to applicant."

Why should applicant be permitted to increase the stock base on which additional dividends may be anticipated, without a showing of resulting benefit to applicant? And why should the denial not extend to the issuance of a stock dividend to a railroad which has no need for more stock?

The answer suggested by the majority report is that the applicant has a need for more stock in order that it may have a larger stock base, and in order that it may execute a new mortgage under which the permissible bond issues may be greater than those expedient under its present general mortgage. That this is technically true may be at once conceded. But the differentiation made between the additional stock which the applicant is found to need and the additional bonds for which the railroad is found to have no need, rests on the rather tenuous ground that future financing will be promoted by an increase in stock. The total stock as increased, it may be observed, will carry no greater equity than the existing stock, and will be worth intrinsically no more as collateral. If this distinction is the only valid distinction between the two parts of the application, what justification can be found for a proposal to capitalize surplus derived from earnings and invested in the property when there is no intention of executing a new mortgage requiring an enlarged stock base, or of executing any mort-

gage at all? No one may question the right of owners to compensation for sacrifices made in foregoing dividends, as the majority report affirms, but it would appear that the finding of the need of the railroad for more stock which will cast an increased dividend charge on the carrier and the simultaneous finding of no need for more bonds carrying additional fixed charges is rested on an essentially technical or formal basis.

The essential error, as it appears to me, in the reasoning of the majority report is centered in its too exclusive consideration of the Burlington as a separate and distinct legal entity, and in a disregard of the essential factors in the case. Railroad corporations, after all, are but legal instrumentalities by which individuals effect their ends. To disregard the individual shippers served and the individual investors involved, to say nothing of the general status of railroad credit, by confining attention to the legal entity known as the Burlington, is to miss the significance of the whole situation. The two northern carriers, the Northern Pacific and the Great Northern, own substantially 98 per cent of the stock of the Burlington. "Both the wisdom and legality of the joint acquisition * * * are questions foreign to this proceeding." Since they acquired their ownership they have permitted a large part of the Burlington's earnings to be reinvested in extensions, additions and betterments. In consideration thereof they are to obtain a stock dividend of approximately $60,000,000. But these northern carriers in their acquisition of the Burlington stock executed joint obligations of approximately $215,000,000 which fall due on July 1, 1921. The refinancing of an amount as great as this is unparalleled in the history of railroads, and is to be undertaken at a time when the ordinary run of investments is carrying unusually high rates of interest. The plan which these northern companies propose is to discharge a part of this huge obligation by obtaining $80,000,000 in bonds of the Burlington, of which they are the proprietors, and by applying the proceeds thereof to that end. The residue of the indebtedness they propose to finance jointly or severally by the issuance of their own obligations. In essence, their plan, matured after months of study, is to redistribute the $215,000,000 of indebtedness, so that a part thereof will be secured by the bonds of the strongest member of the trio. If the proposal were to saddle a part of the debt upon a carrier only distantly related to the two northern companies, and in which they had not for 20 years past reinvested the greater part of its earnings to which they were currently entitled in dividends, the plan would merit instant disapproval. But in thus proposing to mortgage the Burlington, they are mortgaging property built up out of earnings to which as proprietors they might during the past 20 years have asserted and enforced their claim. In reality, therefore, the proposal is akin to one which proposes in discharge of indebtedness, to pledge as part security that which, by reason of their equity therein, is their most available asset. It is testified that this plan of refunding will save annually in fixed charges an amount computed to be not less than $688,000, and which may be as great as $3,529,000. The exact annual saving depends on the interest rate necessary if the two northern carriers alone issue bonds for refunding. This annual saving in fixed charges is the essence of the matter. In the aggregate, the saving spread over the life of the bonds proposed to be issued, will be of the greatest magnitude.

To deny the proposed issue of Burlington bonds in the belief that the refunding can be accomplished at an undefined but reasonable rate of interest by the issuance of mortgage bonds by the two northern companies alone, secured by the pledge of the Burlington's stock, appears to me to be a radically unwise step. When the transportation act, 1920, prescribed a return to carriers uniform for all rate groups, and expressly emphasized "honest, efficient and economical management," the rejection of a project which would permit savings in fixed charges running into the millions, is directly at variance with the expressed object of the statute.

It is, of course, conceded that the application to capitalize surplus for a bond dividend ought not to be granted, unless it clearly appears that such a dividend, which might properly be restricted to the $80,000,000 requested for refunding purposes, would leave a substantial surplus uncapitalized, and would involve no reasonable doubt of the Burlington's ability to meet the additional fixed charges. These matters are not discussed in detail in the majority report, and are therefore analyzed in the margin.* The separate question of the specific benefit to the Burlington of its co-operative operation with the two northern lines is recited in the dissenting memorandum of Commissioner Ford.

There are two further observations which seem pertinent. The first is that the approval sought of the pending application is based on the situation disclosed in this particular case, and would affect not at all the indefinite continuance of the joint ownership of the Burlington by the two northern lines, or the question of future consolidations that may arise under section 5 of the interstate commerce act.

The second relates to the responsibility of certain financial interests and institutions for the rate of interest on whatever securities may issue to effect the refunding of the Burlington Joint 4's. The rates of interest currently prevalent, are fundamentally traceable to world-wide causes which can be affected only in a minor and largely inappreciable degree by the instrumentalities through which securities are currently marketed. Just as the rise in war prices was a universal outcome of the relative scarcity of commodities, so the prevalent high rates of interest are a result of the universal dearth of capital seeking investment as compared with the current demand therefor. The high interest rates, as has so often been pointed out, are rather the symptoms of the evil the industrial world confronts in the relative dearth of capital, rather than the essential evil itself. Holders of maturing obligations are offered a wide range of choice in investments carrying attractive rates of return. The instrumentalities which effect the marketing of securities have therefore to reckon with a situation not of their creation and which they can not materially affect.

Eastman Objects to Capitalization of Surplus

EASTMAN, Commissioner, dissenting in part:

I concur in the result reached by the majority, except that I believe the stock dividend should also be denied.

The chief purpose of the stock and bond dividends sought is to meet the needs, not of applicant, but of its stockholders, the Northern Pacific and the Great Northern. The most persuasive argument in favor is the saving in interest charges which might result. The joint 4's, which now total about $215,000,000, fall due on July 1, 1921. It is testified that if the attempt is made to refund them by the issue of bonds of the same kind, it may not be possible to do so on better than an 8 per cent basis. On the other hand, applicant can issue $80,000,000 of bonds on a 6 per cent basis, and if it is permitted to do this and turn over the proceeds, or the bonds themselves, as dividends to the Northern Pacific and Great Northern, the amount so realized can be used to retire some of the maturing bonds and the remainder can be refunded by the issue of mortgage bonds of the northern lines, with the net result that something like $3,500,000 in interest charges may be saved. This saving is apparently figured by comparison with the issue at 8 per cent of collateral trust bonds like those maturing and not by comparison with the issue of mortgage bonds of the northern lines for the total amount.

But is the reasoning sound? In 1901 the

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*Making reasonable allowance by way of offset against the applicant's asserted investment out of earnings since June 30, 1901, and down to August 31, 1920, it may be reasonably assumed that a surplus in excess of $140,000,000 has since that period been accumulated by the applicant out of earnings invested in and now existing in railway property permanently and necessarily devoted to serving the interests of the public and no part of which is now represented by issued capital obligations outstanding. It should be added that if applicant's contention is substantiated with reference to amounts legally due it by reason of the guaranty for the six months following federal control and for compensation during federal control, the corporate surplus which it now claims will be materially augmented. As of August 31, 1920, applicant's comptroller estimated as due under the guaranty alone $21,668,851.15.

It is generally conceded that where a carrier has accumulated a surplus a certain part thereof should remain uncapitalized. This part should cover non-revenue producing property, and also serve as a fortification of credit. If such a minimum surplus remains uncapitalized, but invested in revenue-earning property, there is an assurance that even in times when the ordinary level of returns is somewhat depressed, the carrier's earnings from a property base in excess of its issued capital will afford the opportunity to pay returns upon the capital outstanding. It is therefore proper to inquire what residual surplus would remain uncapitalized should a total issue of $60,000,000 in stock and $80,000,000 in bonds be approved in this case. Applicant's balance sheet for August 31, 1920, shows as before indicated, and exclusive of $21,668,851.15 estimated to be due under the guaranty, a surplus of $233,239,309.28. If the corporate surplus last indicated be reduced by $10,767,815.75 for estimated additional depreciation in equipment not then carried in the carrier's accounts, said corporate surplus would be reduced by the issuance of $140,000,000 in additional securities to $82,471,493.53. This, however, represents the total corporate surplus as against which there stand assets of the applicant outside of those in its own road and equipment. However, the remaining uncapitalized surplus may be gauged from another standpoint. The balance sheet aforesaid gives as investment in road and equipment $503,745,837.57. If we deduct therefrom not only the accrued depreciation on equipment of $40,647,507.63 now carried among the corporate liabilities, but also the additional estimated extra depreciation of $10,767,815.75, the investment in road and equipment would be reduced to $452,330,514.19. This last named amount would exceed by $27,450,614.19 the total outstanding capitalization that would exist if the additional $140,000,000 in securities should be now authorized. When in addition to this $27,450,614.19 excess, allowance is made for the estimated amount of $21,668,851.15 due under the guaranty, there would be in excess of the outstanding capitalization over $49,000,000, to which, if we were to estimate the total corporate surplus, a large and substantial addition would have to be made for cash on hand amounting, as of August 31, 1920, to over $13,750,000 for materials and supplies, in excess of $17,500,000, and for investments in affiliated properties, especially the Colorado & Southern, all of which, even when allowance is made for offsetting items would indicate a residual uncapitalized surplus of such substantial magnitude that it is clear that the issuance of $140,000,000 additional securities would not fail to leave an ample margin of uncapitalized surplus.

The net income and income applicable to dividends since July 1, 1901, stated in tabular form, are as follows:

Term		Net income	Income applicable to dividends
Since July 1, 1901	Total	$351,818,777	$335,511,060
	Annual average	18,355,759	17,504,925
Since July 1, 1909	Total	245,198,601	234,463,076
	Annual average	21,958,077	20,996,693
Since July 1, 1914	Total	161,091,710	153,658,661
	Annual average	26,122,966	24,917,621

If we assume that future income would approximately equal that since July 1, 1914, it is apparent that, after making the requisite deductions therefrom, including the additional interest charges, there would remain an average annual net income of $21,322,966 and an annual income applicable to dividends of $20,117,621. This latter amount would suffice to pay a dividned of about 11¾ per cent on $170,839,100, the amount to which the capital stock would have been increased, or to pay a dividend of 6 per cent thereon, leaving annually $9,867,275 available for extensions, additions and betterments. It should be stated that in the figures just cited the amounts for 1918 and 1919 are based on applicant's just compensation under federal control and the amount for the 8 months ended August 31, 1920, on the guaranty under section 209 of the transportation act, 1920. For the 12 months of 1920 the railway operating income of the applicant, deducting for equipment rents and joint facility rents, appears to be only $8,012,045.93. These figures, however, covered by applicant's December returns, do not include any part of the estimated amount of $21,668,851.15 due under the guaranty. Applicant's lessened earnings in 1920 appear to be attributable to causes which have affected all carriers. Assuming, as we may, that these causes are but temporary and have been in a measure counteracted by increased rates accorded, it can not be said that the public interest is adversely affected by the proposed security issues impairing the substantial soundness of applicant's financial structure.

holders of Burlington stock sold it at the excellent price of $200 per share, and 4 per cent interest has since been paid upon that amount, equivalent to $8 per share on the stock. If, upon maturity, they should be offered, in place of the collateral trust bonds, an equal amount of 6 per cent mortgage bonds (or bonds secured in part by the stock and in part by the mortgage) of the Northern Pacific and the Great Northern, this would be equivalent to $12 per share on the stock originally sold, or a return 50 per cent greater than has been paid for the past 20 years, combined with greater security. Would they reject such an offer and insist upon 8 per cent bonds, doubling the return, at a time when the railroads of the country are struggling desperately against a temporary tide of depression?

I have enough confidence in the investors of the country so that I do not believe that they would, if the situation were frankly explained and its bearing upon the general welfare of the country made clear. I realize the difficulty in attempting to control what appear to be current rates of interest. But this is a unique situation, and I am confident that investors will readily appreciate that under its special circumstances, and looking beyond the immediate present, they have more to gain than to lose from forbearance and moderation.

There is, moreover, a further alternative. Under the indenture securing the joint 4's, the holders of three-fourths in interest may agree, upon default, to accept applicant's stock in full satisfaction of their claims, and by such agreement they may bind the remaining one-fourth in interest. If this method of meeting the situation could be adopted, it would, it seems to me, be to the advantage of all concerned. For 20 years the northern lines have held control of the Burlington system, and the benefits have been admittedly large. But the advantages of such control are no longer so important as they once were, in view of the wide powers over divisions, the routing of freight, and the use of terminal facilities conferred upon us by the transportation act, 1920. The return of applicant's stock to the holders of the joint 4's would place them in immediate possession of these very valuable shares; the chief argument for imposing upon applicant a new load of fixed charges would be gone; the credit of both the Northern Pacific and the Great Northern would be improved by the reduction in their own fixed charges; and the way would be left open for the consideration, without embarrassment, of the possible future union of the Burlington system with other railroad properties.

But the question before us is larger than one of mere interest rate. Applicant asks authority to issue $80,000,000 of mortgage bonds and $60,000,000 of stock, both issues to be used for dividend purposes. The bond dividend will be one of 72 per cent, and the stock one of 54 per cent. The total would fall short but $35,000,000, in par value, of the aggregate paid in dividends since 1901. The dividends prior to that year are not stated of record, but no claim is made that the return was inadequate. Since 1901 the dividend rate has averaged 8.5 per cent. The $140,000,000 of bonds and stock now sought for dividend purposes represent additional earnings which were turned back into the property. In other words, it is proposed to capitalize $140,000,000 of invested surplus. If all the excess earnings had been paid out in dividends from year to year, however, the aggregate of such dividends would not have equaled the present surplus, for it has grown in part from its own earnings.

Authority to issue these securities can not be claimed as of right. It is subject to our determination, and we may grant authority only if we are able to make the statutory finding that the issue is "compatible with the public interest" and for an object "which is necessary or appropriate for or consistent with the proper performance by the carrier of service to the public as a common carrier, and which will not impair its ability to perform that service."

Nor is it possible by denying the application to deprive applicant of any right. On this point there has been much confusion of thought. If the Burlington is lawfully entitled to 6 per cent or any other return upon the fair value of all its property, including invested surplus, nothing that we can do can take away this right; and such return, if earned, can be paid regardless of the volume of securities outstanding. The real question, therefore, is whether it is "compatible with the public interest" to translate the invested surplus into shares of stock and mortgage bonds. I believe it is not, both because such translation may operate to enlarge rights of applicant as against the public and prejudice the consideration of a question which has an importance spreading far beyond the limits of this case, and because it will weaken applicant's splendid financial strength.

The carriers have again and again told us that sound policy demands that rates be high enough to permit not only the payment of reasonable dividends, but the accumulation of large surplus reserves. Some have reduced this to the rule that for every dollar paid in dividends, a dollar from earnings should be invested in the property. Financiers have been equally emphatic in favoring such a policy. Summarizing the arguments, we have been told that stockholders are interested quite as much in regularity and dependability of dividends as in their amount; that surplus reserves are necessary to maintain such regularity, and to protect against inevitable and wide fluctuations of earnings and financial disturbances; that they are needed for improvements which will not immediately yield revenue, or which will never do so, but are required to enable a company to keep abreast of the times and furnish the best of service; and that they are equally necessary to enhance credit and enable financing upon favorable terms without disproportionate increases in funded debt.

With the representations of the carriers in favor of surplus earnings, have gone equally emphatic representations by shippers. They claim that when such earnings, over and above reasonable dividends, are invested in carrier property, the public, having provided the funds, has an interest in that property and can not fairly be asked to pay the same return upon it as upon property representing actual sacrifice by investors. They deem it unjust to ask the public to provide both capital and return. While such a surplus may be the property of the carrier, the claim is that the circumstances attending its accumulation impose a duty upon the carrier at least to share its advantages with the public, and that this duty may be considered in valuation for rate making purposes.

It is not a sufficient answer to this doctrine to say that the property acquired from surplus earnings is owned by the carrier, for the rights of ownership are not absolute, but limited by the dedication of the property to the public use and the circumstances of such dedication. Nor is it enough to say that the surplus might have been distributed to the stockholders at the time it was earned, for the public might well have declined to acquiesce in rates producing excess income if that income had not been used for the improvement of the property. The question has many aspects. It would be a curious anomaly to accept the theory that rates should be high enough to permit the investment of income in non-revenue-producing improvements, and then hold that a company may exact a return upon such property. It would be just as anomalous to approve the building up of sinking funds for the retirement of debt, and then permit the exaction of a return upon the property for which the debt so retired was incurred, or permit its recapitalization. Over $31,000,000 of applicant's surplus was derived from the retirement of debt in this manner, and more than $10,000,000 is represented by sinking funds in process of accumulation.

The courts have said that a carrier is entitled to a reasonable return upon the fair value of its property, but the full meaning of the words "fair value" still remains to be determined. Without undertaking to argue the point now, I think it is clear that the word "value," as it has thus been used by the courts, has a meaning quite different from that which it carries in ordinary usage. It has been said that the determination of such value is "the determination of what, under all the facts and circumstances of the case, is the just and equitable amount upon which the return allowed to the corporation is to be computed."

I make no claim that the Supreme Court of the United States has yet conclusively determined that property acquired from excess earnings is to be treated differently from other property in valuation for rate-making purposes. I do believe that this is still an open question.

The carriers are inclined to ridicule the suggestion that these surplus accumulations are held in any way as a trust fund in behalf of the public. From one standpoint this ridicule may be justified; but nevertheless there is, I believe, a trust in connection with these accumulations. The trust is upon us. Whatever may be our views as to the merits, we ought to take no action which will foreclose or impair the opportunity to bring this issue fairly before the Supreme Court. To permit the capitalization of surplus will, I fear, do this very thing.

The danger involved is the more important because the question at issue is closely allied to the question involved in the recapture of excess earnings under section 15a of the interstate commerce act. Indeed, in argument before us upon the application of the Delaware, Lackawanna & Western for authority to capitalize surplus, counsel for the Association of Railway Executives urged the right of stockholders to all the earnings of the property in substantially the same terms that have been employed in questioning the validity of the recapture provisions of the present act.

Summing up this phase of the matter, applicant may have a right to a return upon its surplus, but whether or not the surplus shall be translated into stocks and bonds is subject to our determination under the law, and whatever right to a return it has, can not be lost by the denial of the authority desired. On the other hand to grant the desired authority may prejudice and embarrass the decision of a question which has far-reaching importance.

But there is a further ground for denial, entirely separate and distinct. Assume all the carriers claim with respect to the first ground, does it then follow that the stock and bond dividends proposed are "compatible with the public interest"?

At this point we hark back to the reasons for surplus accumulations which have been urged upon us over and over again. No better proof that such accumulations do improve credit could be offered than the testimony that applicant is now able to issue $80,000,000 of bonds for cash on a 6 per cent basis. How many carriers can do this under present conditions? If its credit has thus been enhanced, will it not be impaired by the addition of $4,800,000 per year to its fixed charges and by the capitalization of all but a comparatively small portion of its surplus? And has the public no interest in such impairment?

Consider the matter from another angle. Our attention has repeatedly been called to the danger of a disproportionate increase in funded debt and we have been told that it is vital that the carriers should be able to finance their needs in part by the issue of stock. With its present capitalization, applicant is one of the very few railroads in the country which could probably market stock—if not common, at least preferred—even under present conditions. Will not the distribution of $60,000,000 of stock gratis impair this ability to some extent at least?

And if stock dividends are not open to question, what shall be said of bond dividends? After its stockholders have foregone extra dividends for years and approved the use of surplus earnings for improvements in times when money could have been borrowed at 4 per cent or better, can it be argued that it is sound financial policy to permit applicant to reverse this procedure and borrow money on the worst market in its history for the purpose of reimbursing stockholders for their previous moderation? To ask this question is to answer it. The surplus has been invested in property. Even if the stockholders have a right to demand a return upon that property, they are certainly not entitled to ask that applicant now issue mortgage bonds for the sake of replacing in the treasury, for distribution in dividends, the cash which was so invested.

The truth is that applicant, as it is now capitalized, is one of the fortunate carriers of the country. If all other carriers had been financed with equal conservatism and sound financial judgment, our railroad problem would be far less serious. Its credit is unsurpassed, its stockholders seem assured of regular and dependable returns, for 20 years they have had dividends averaging more than 8 per cent, and if they should now wish to reap the reward of good management by increasing the regular dividend rate somewhat or by occasional extra dividends, there are few who would question the appropriateness of such action. Applicant ought not, I think, in the public interest or in its own interest, to be permitted to abandon this position of vantage in the absence of compelling need by greatly increasing the volume of its outstanding securities and the measure of its fixed charges. Rather, it ought to avoid unnecessary increase in capitalization and finance its own actual needs by the issue of stock, or if this is for the time being impracticable, by the issue of bonds and stock in equal proportions.

The kernel of the application is the request for authority to issue $80,000,000 of bonds. The $60,000,000 stock dividend which the majority have approved is a far less important part of the plan and, without the bonds, will be of relatively little consequence to applicant or its stockholders. From the public standpoint the objections differ only in degree. The application should, I feel, be rejected in its entirety.

Ford, Commissioner, dissenting:

Although I concur in so much of the majority report as authorizes the issue of capital stock, I dissent from the finding that applicant has not justified the issuance of bonds against its surplus. I allow that the formal terms in which the application was made did not warrant our approval of the bond issue as proposed. I allow that on the face of it any proposal to issue bonds as a dividend to stockholders is not only vicious in character, but is also reminiscent of practices that have in the past brought shame and disgrace upon American railroad management. But the application was accompanied by explanations of purpose, which purpose we had power to secure by appropriate stipulations, that seemed to me to entitle it to our favorable consideration to the extent of granting authority to issue $80,000,000 in 6 per cent bonds as well as $60,000,000 in stocks. It seemed to me that when the circumstances of the case were duly considered, the essence of the proposition before us was whether we should facilitate arrangements tending to conserve the present relations between this applicant and the controlling roads and to obtain for them needed financial accommodations on favorable terms.

The record shows that nearly 98 per cent of the capital stock of the Burlington road is held in joint ownership by the Northern Pacific and the Great Northern. At a time when the Burlington was in need of Pacific Coast termini which it was planning to obtain by extension of its lines, and when the Northern Pacific and the Great Northern were in need of terminal facilities at Chicago and other western cities which they were planning to obtain, it was decided that combination of interests would supply these needs more economically and efficiently than would be possible by independent action, each carrier for itself. After efforts made in various directions, the northern carriers in 1901 obtained control of the Burlington. Since then the mileage owned and operated by the Burlington has been increased over 1,334 miles and the freight tons handled have increased from about seventeen millions in 1901 to over forty-nine millions in 1919. The financial results of this increase are set forth in the following table, in which the Burlington is contrasted with systems of similar character, one of which, the Chicago & Northwestern, had been sought in the way of similar alliance before the northern carriers turned to the Burlington:

	Net income		
	Chicago & Northwestern Ry. Co.	Chicago, Milwaukee & St. Paul Ry. Co.	Chicago, Burlington & Quincy Ry. Co.
Year ended June 30, 1901..	$10,146,563	$8,183,157	$8,159,520
Year ended June 30, 1902..	10,810,328	9,640,458	10,060,064
Year ended June 30, 1903..	10,751,849	10,473,259	13,395,047
Year ended June 30, 1904..	9,625,241	10,718,401	12,943,111
Year ended June 30, 1905..	10,642,822	11,858,826	13,829,905
Year ended June 30, 1906..	15,026,053	10,782,764	12,852,919
Year ended June 30, 1907..	15,965,566	13,489,813	13,141,931
Year ended June 30, 1908..	13,864,191	12,555,450	12,684,089
Year ended June 30, 1909..	14,159,794	13,112,200	13,046,909
Year ended June 30, 1910..	12,523,997	17,315,815	13,975,621
Year ended June 30. 1911..	12,828,100	16,358,314	17,506,073
Year ended June 30, 1912..	11,505,331	9,913,838	14,764,732
Year ended June 30, 1913..	14,875,013	17,643,038	20,086,196
Year ended June 30, 1914..	12,306,142	15,457,233	17,774,268
Year ended June 30, 1915..	11,914,049	12,108,175	19,041,919
Year ended June 30, 1916..	17,282,510	16,860,684	29,846,270
Year ended Dec. 31, 1916..	20,368,924	16,209,842	32,994,726
Year ended Dec. 31, 1917..	17,125,031	4,605,595	29,406,032
Year ended Dec. 31, 1918..	9,810,822	6,457,361	22,792,500
Year ended Dec. 31, 1919..	13,453,186	7,785,453	23,542,471

It is admitted that although the fixed charges of the Burlington would be augmented by this bond issue, its capitalization per mile would still be low as compared with that of other large systems in the same general territory. Per mile of road owned it amounts for the applicant, to $31,836.45, as against $46,232 for the Chicago, Rock Island & Pacific; $47,919 for the Chicago & Northwestern; $52,641 for the Great Northern; $55,875 for the Atchison, Topeka & Santa Fe; $56,046 for the Missouri Pacific; $60,165 for the Chicago, Milwaukee & St. Paul; $65,488 for the Northern Pacific, and $87,196 for the Union Pacific. In case there were authorized $60,000,000 additional stock and $80,000,000 additional bonds, or a total of $140,000,000, the applicant's capitalization per mile would amount to $47,478. I see no grounds whatever for thinking that the applicant's ability to serve the public would be at all impaired.

The immediate need for a bond issue is to provide for the maturing obligations of the northern carriers, contracted in acquiring their holdings of Burlington stock. If they can get the use of $80,000,000 of Burlington bonds they say they can by that much reduce the amount of their maturities and can then refund the remainder at about 6 per cent. If denied that resource, they say they will not be able to effect refunding for less than about 8 per cent. The majority report does not share applicant's apprehensions relative to the difficulties of refunding operations at a reasonable rate of interest without this Burlington bond issue, but it will scarcely be disputed that it will cost more without that issue than with the use of it by the controlling roads.

The evidence presented to us has been such as to convince me that the practical results of the relationships between the Northern Pacific, the Great Northern and the Burlington have been signally to the advantage of all these carriers, and particularly to that of the Burlington; that it is to the public interest that this relationship shall be allowed to continue; that it is to the interest of the Burlington that the controlling carriers shall not be subjected to interest charges that can be avoided if they are allowed to avail themselves of their equities in the Burlington's assets; and that it is to the public interest that carriers shall not be unnecessarily burdened with capital costs which must inevitably be reflected in their charges to the public for their service, and in the character of that service. Therefore it appears to me that while in form this proposed bond issue was a dividend to stockholders, it was in substance a readjustment of obligations to the common benefit of all three carriers, and decidedly to the public interest.

Interstate Commerce Commission Orders Increase in Texas Rates

Washington, D. C.

The Interstate Commerce Commission has rendered its decision in the Texas intrastate rate case in which, following similar decisions in other states, it orders an increase in the intrastate rates and fares corresponding to the increases allowed on interstate traffic in its decision in Ex Parte 74. The Texas commission had limited the increases in intrastate rates and charges for freight service to 33⅓ per cent in place of the 35 per cent which was allowed for interstate traffic in that territory, and it denied any advance in passenger fares on the ground that it was without jurisdiction to authorize increases above the rates fixed by the state statute, which provided for a fare of 3 cents per mile.

The commission in its decision refers to its previous decisions and orders in various cases affecting Texas rates, particularly the Shreveport case, in which maximum class rates and many commodity rates were prescribed and says that under the requirements of the Shreveport case and other cases in which the Shreveport scale has been prescribed the rates on interstate commerce to and from Texas and the great majority of rates on intrastate traffic in Texas have been placed upon a fixed and non-prejudiced relationship which was not destroyed by the decision in Ex Parte 74.

It is estimated that less than 30 per cent of the traffic moving intrastate over the 26 principal carriers in Texas was affected by the order of the Texas commission. The rates on over 70 per cent were increased 35 per cent to accord with the increases in interstate rates. The commission in its decision says in part:

Based on the intrastate revenue of the principal Texas lines during the year 1919, derived from freight traffic not subject to the orders in the *Shreveport Cases,* and assuming that the same volume of traffic will continue in the future, the carriers estimate that their annual loss in revenue, due to the restrictions placed upon them by the Texas commission, will approximate $265,000. The anticipated loss in passenger revenue is much greater. During 1919 the Texas lines earned from their intrastate passenger traffic slightly less than $35,000,000. With the same volume of traffic the fares approved by us and made effective on interstate travel would yield an annual return greater by $7,000,000. It is estimated that an additional loss of over $1,500,000 will result from their failure to receive the surcharge upon passengers occupying space in sleeping and parlor cars. The record shows that for the seven months ended July 31, 1920, the operations of the Texas lines, including both state and interstate traffic, were conducted at a loss of more than $10,000,000.

For many years the passenger fares in Texas were the same per mile as those assessed for the interstate carriage of passengers. Since August 26, 1920, the intrastate passenger has been accorded a material advantage, although he may travel in the same train and even in the same seat with an interstate passenger who pays a higher fare. A passenger from Shreveport destined to Houston, for example, will pay a fare of $8.38, exclusive of war tax, for the distance of 233 miles, while an intrastate passenger from Longview, going to the same point, will be required to pay but $6.98 for the same distance, a difference in favor of the latter of $1.40. For most of the distance they may travel on the same train. A passenger traveling from Kansas City to Houston occupying a lower berth will be charged a total fare of $38.82, including war tax, while an intrastate passenger traveling from

Sierra Blanco to Houston, substantially the same distance, will be charged $29.87, or $8.95 less.

Business houses located in Shreveport, Kansas City, and cities in other states compete with local Texas concerns in the development of trade and commerce in Texas. One of the items of expense common to both is the railroad fare of salesmen. The higher basis of fares required is a burden on them.

The lower fares in Texas tend to convert interstate revenue into intrastate revenue. This results from the common practice of rebuying tickets at border points, paying the intrastate fare in Texas and the interstate fare beyond the border. The record indicates that at three such points on the Texas & Pacific Railroad, 120 passengers, on an average, are daily rebuying tickets to defeat the interstate fares. The Missouri, Kansas & Texas Railroad enters the state of Texas near Denison, and the number of passengers rebuying tickets at that point renders it necessary at times to hold the trains for their accommodation. Because of the large territory covered by the state of Texas the practice of rebuying tickets causes a substantial loss to the carriers. The distance from the eastern border of the state to the western border is over 900 miles and the earnings on interstate travel may be adversely affected to the extent of $5 per ticket on travel across the state, and, with Pullman surcharge added, over $8.

The carriers introduced voluminous exhibits in which they have undertaken to apportion their revenues and expenses between state and interstate freight traffic and thus determine the rates of return on the values of their properties within the state devoted to the public use. The information was developed by the application of what is known as the Oklahoma formula—a formula devised to provide a means for segregating revenues and expenses as between freight and passenger traffic, line and terminal, and state and interstate. The general purport of these exhibits is to show that the carriers, as a rule, have received during recent years a lesser rate of return from their intrastate than from their interstate operations.

Evidence relating to the earnings of the carriers on state traffic was received over objection of counsel for the state commission, and in order to afford that commission an opportunity to submit similar data in its possession, upon which it had predicated its findings, a further hearing was ordered. The record as supplemented, contains the calculations relied on by the Texas commission as establishing the fact that an increase of 33⅓ per cent in intrastate freight rates, added to the amount derived from the increased interstate rates and fares, would yield the carriers fully 6 per cent net return on the property investment.

We deem it unnecessary for the purposes of this report to enter upon a discussion of the testimony and exhibits dealing with the valuations of railroad properties in Texas and the earnings of the carriers on state traffic. In a proceeding similar to this, *Increased Rates within Illinois,* 59 I. C. C., 350, it was urged that in prescribing the measure of the increases to be applied to the rates and charges of the carriers throughout the country necessary to yield the return fixed by Congress for the two years beginning March 1, 1920, we had failed to determine the values of the railroad property separately in that and other states. We pointed out therein that Congress had laid upon us the duty of prescribing rates so that in the aggregate they would yield a certain return, as nearly as may be, "upon the aggregate value of the railroad property of such carriers held for and used in the service of transportation," and expressed the view that the interstate commerce act required us to determine upon a valuation for the total property of the carriers and not for the property that might be assigned to interstate traffic. We adhere to that view and repeat that, in our opinion, the manifest intent of Congress was to repose in us full and final authority to provide the revenues found necessary to yield the specified return by considering the entire structure of rates, both state and interstate, and the aggregate value of the railroad property held for and used in the service of transportation without regard to state lines, and to protect interstate commerce against any rate, fare, charge, classification, regulation, or practice that causes discrimination.

Acicdent Reports, Third Quarter, 1920

The Interstate Commerce Commission, Bureau of Safety, has issued its "Summary of Accident Investigation Reports No. 5," which is for the quarter ending with September, 1920. The pamphlet fills 56 pages and the index shows 25 accidents, as follows (the first two occurred in 1919, all of the others in 1920):

ACCIDENT INVESTIGATION WITH REFERENCE NUMBERS

650. Baltimore & Ohio, Glenwood, W. Va., December 11.
653. St. Louis-San Francisco, Knobview, Mo., December 21.
703. Minneapolis & St. Louis, Livermore, Iowa, July 3.
704. Peoria & Pekin Union, Acme, Ill., July 3.
705. Lackawanna & Wyoming Valley, South Pittston, Pa., July 3, 1920.
706. Missouri, Kansas & Texas, Atoka, Okla, July 4.
707. Southern, Piedmont, Ga., July 8.
708. Atchison, Topeka & Santa Fe, Kirkland, Ariz., July 9.
709. Western Maryland, Conboy, Pa., July 23.
710. Texas & Pacific, Orphans Home, Texas, July 23.
711. Oregon Short Line, Zenda, Idaho, July 31.
712. Gulf, Colorado & Santa Fe, Nicholls, Texas, August 10.
713. Chicago, St. P., M. & O., Hospers, Iowa, August 10.
714. Union Pacific, Corlett Junction, Wyo., August 19.
715. New York, N. H. & H., Yalesville, Conn., August 21.
716. Kansas City, Mex. & O., Paret, Texas, August 24.
717. Pennsylvania, Alliance, Ohio, August 26.
718. Louisville & Nashville, Mullins, Ky., August 27.
719. Pere Marquette, New Boston, Mich., September 1.
720. Denver & Interurban, Globeville, Colo., September 6.
721. Washington & Old Dominion, Clark, Va., September 11.
722. New York Central, Canastota, N. Y., September 18.
723. Texas & Pacific, High, Texas, September 20.
724. Detroit United, Ortonville, Mich., September 24.
725. Chicago, M. & St. P., Piedmont, Mont., September 30.

Of the collisions here described, eight, not including those on interurban lines, occurred on lines which are reported as having no block system in force. These eight are the Atchison, Topeka & Santa Fe; the Gulf, Colorado & Santa Fe; the Kansas City, Mexico & Orient; the Minneapolis & St. Louis; the Peoria & Pekin Union; the Southern; the Texas & Pacific, and the Western Maryland.

Trainmasters, despatchers and others will find many interesting facts in this pamphlet, none the less interesting because several months old. Beginning on page 41 there is an instructive chapter on how not to manage things when running passenger trains on a double-track line against the current of traffic. The despatcher and the superintendent come in for censure as well as men of lower degree.

The time-honored custom of running circus trains with cars in poor condition and without suitable brakes appears not yet to have been abandoned, as will be seen readily from the report of a collision at High, Texas, on September 20, 1920.

One report which the busy reader may perhaps think himself too busy to read is that of a rear collision at Canastota, N. Y., on September 18, in which two employees were killed and which report, after giving interesting details for more than a page, gives the true explanation in a single line, at the end; it appears that the engineman was at the time sound asleep.

For a case in which the conditions were 100 per cent bad the reader will perhaps turn to the report of a butting collision, page 20, near Piedmont, Ga., on July 8, resulting in the deaths of three employees, where the engineman overlooked an opposing train, and where the conductor and all the rest of the crew were unfamiliar with the road. And the engineman had only recently been promoted from fireman.

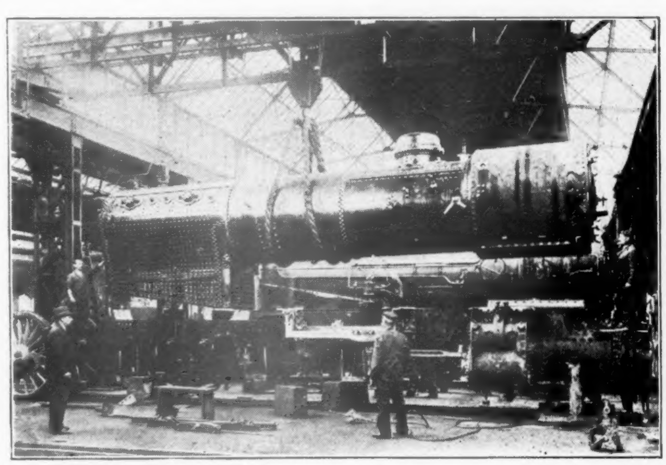
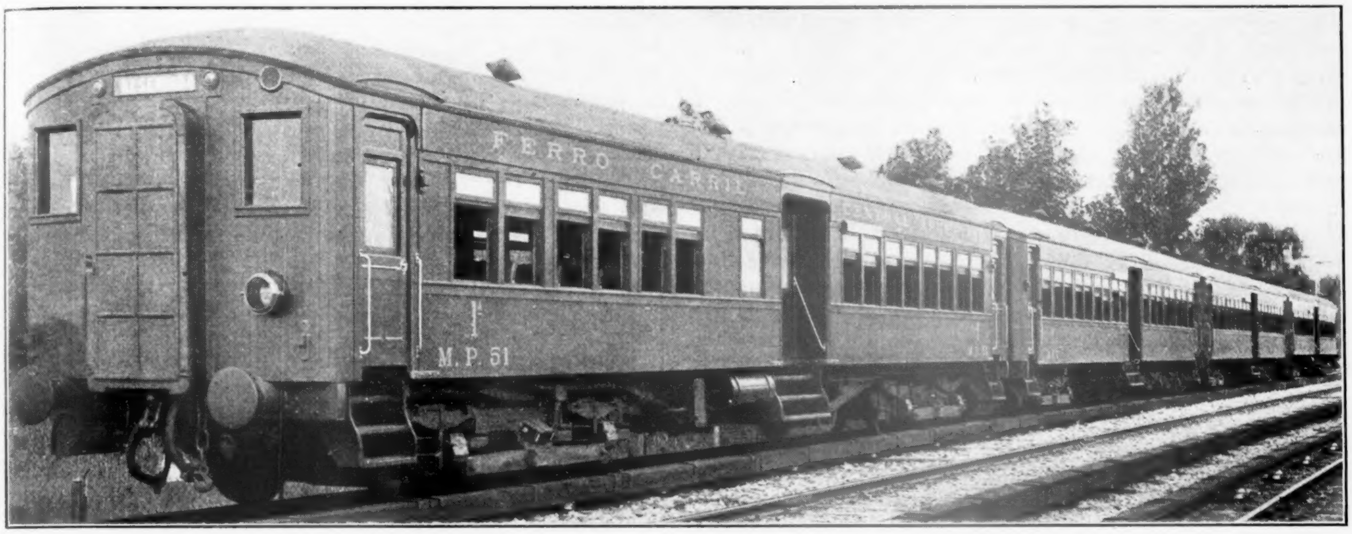


Photo by Keystone View Co.

A German Locomotive Plant Where Engines Are Being Built to Deliver to France Under Terms of the Treaty

THE CENTRAL ARGENTINE'S GORTON WORKS, PEREZ, ROSARIO

1.—Erecting Shop; 2.—A Corner in a Store Room; 3.—An Exterior View of the Locomotive Shops; 4.—Wheel Department; 5.—Blacksmith Shop; 6.—An Exterior View of the Power House; 7.—Inside the Power House



Multiple Unit Equipment on the Central Argentine's Suburban Line at Buenos Ayres

British Railways Predominate in Argentina

The Central Argentine's Modern Equipment and Efficient Methods Exemplify the Country's Progress

By John P. Risque

Part III

BECAUSE OF THE OBVIOUS impossibility of describing in any detail the equipment and operations of all the railways of Argentina, it was decided to select one of the roads which because of its modern equipment and efficient operation could be said to exemplify the extent of railway progress in the country. The Central Argentine, as was noted in a previous installment of this article, was chosen as meeting these requirements.

A Carload of Quebracho the Principal Fuel of Argentina

In the matter of freight equipment this road is comparatively well advanced. The greater part of its rolling stock in freight service consists of large box, flat and grain cars with four-wheel trucks. Many of these cars are of pressed steel. The old six-wheel "goods wagons" of small capacity are rapidly disappearing. Platforms have been added to a number of these old cars, insulation installed and lattice applied, and they are now giving good service as refrigerator cars. All of the rolling stock is equipped with buffers and hook and chain couplers, and the newer cars have vacuum brakes. The popular car roof is of corrugated iron, arched as are the roofs of the passenger cars. The grain cars are provided with manholes in the roofs to facilitate quick loading at the elevators. A considerable amount of freight is hauled in open-top cars covered with tarpaulins. Because of this fact "loading gages" are a feature of most of the freight yards. These gages are suspended loosely from a cross-arm attached to an upright mast. They indicate the limit in the height of the load. An offset is provided in the center to allow for the passage of the locomotive "chimneys."

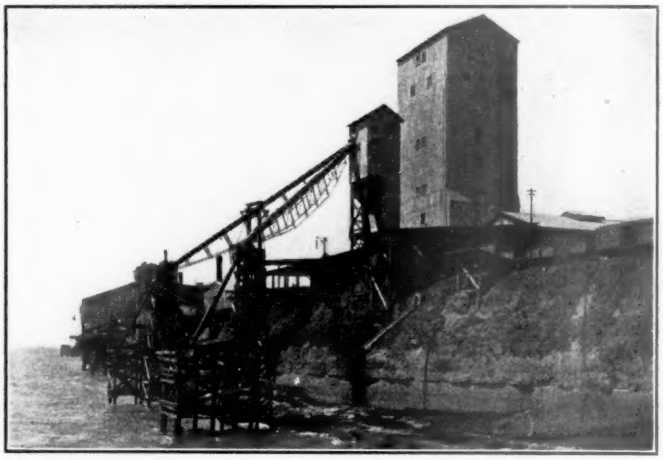
Quick loading and unloading of cattle is facilitated by end doors placed in the cattle cars. A string of empties ready for loading is set on the patron's siding with the first car opposite the cattle runway from the corral and all of the end doors but the last one, at the end of the string of cars, are left open. The cattle are driven in through the first cars, and arranged in order in the last one, after which the door is closed and the loading goes on as before until the job is finished, the doors of each car being closed as the car fills. Compared to the laborious methods of loading cattle cars in this country—one car at a time loaded through a side door, the door closed and the next car pried into place with many pinch bars, and more or less profanity, or—what is more expensive still—a locomotive coupled to the string to move it when necessary—the efficiency of the Central Argentine's method furnishes further food for reflection for those who doubt the ability of foreigners to teach us anything about railroading. The plans showing the designs of those cars are available to us; further information concerning this superior method would probably be gladly furnished by its users. At water stations along the route the stranger's eye will probably not fail to notice the riveted leather waterspouts which hang from the standpipes, in place of the all-metal ball-jointed pipes in use in his own country. The British railroader could learn some things in America as well as teach us.

In September, 1915, the first trains were run on the electrified suburban division of the Central Argentine at Buenos Ayres. This third rail double track system is now in operation between Buenos Ayres (Retiro station) and Tigre, a point on the river of that name about 18 miles distant. Multiple unit power is used, the current being generated at 20,000 volts at a special power house built for the purpose at San Fernando. This current is delivered to four substations along the line by underground cables and is transmitted to the third rails at 800 volts, d.c. The patronage of the line is exceedingly heavy and the service is fast and frequent. Steel underframe cars of unusual length, with doors in the center in addition to those at the ends, are run on this division.

Practically all of the road's cars are built at the Rosario shops, while extensive locomotive shops are operated 10 miles further out of the same city at a point called Perez. This plant bears the name of the "Gorton workshops" and was completed in June, 1912. The boundary fences of the layout include some 70 acres. At the main entrance to the yard is located the administration building for the mechanical department. This building is so well planned and maintained that it seems to the American railroader more like the headquarters of an industrial concern than the headquarters of a railway shop, so little used is he to convenience or comfort in the mechanical department plants in this country. Close inspection of this building, which contains the principal offices, the timekeepers' office, the drafting room, the medical consulting rooms and the mess room, will provide other little lessons here and there for the railroad man who is anxious to make his visit profitable.

The administration building itself would seem to teach that such elaborate preparations for the care of the occupants pay after all, in that the work done by employees so well taken care of can rightly be expected to excel that done by those who are provided only with the dingy and poorly equipped shop buildings used for such purposes elsewhere. Other observations confirm this generalization. For instance the mess room is equipped with convertible benches, the backs of the seats of which are secured by a conventional cast or malleable iron frame at each end and are hinged in such a manner that by pulling them forward a table is formed which has the added advantage that the part of the board upon which the workman leans before the change is the bottom side of the table upon which he eats his lunch. A stop, arranged at the hinge, limits the travel of the frames to the desired point.

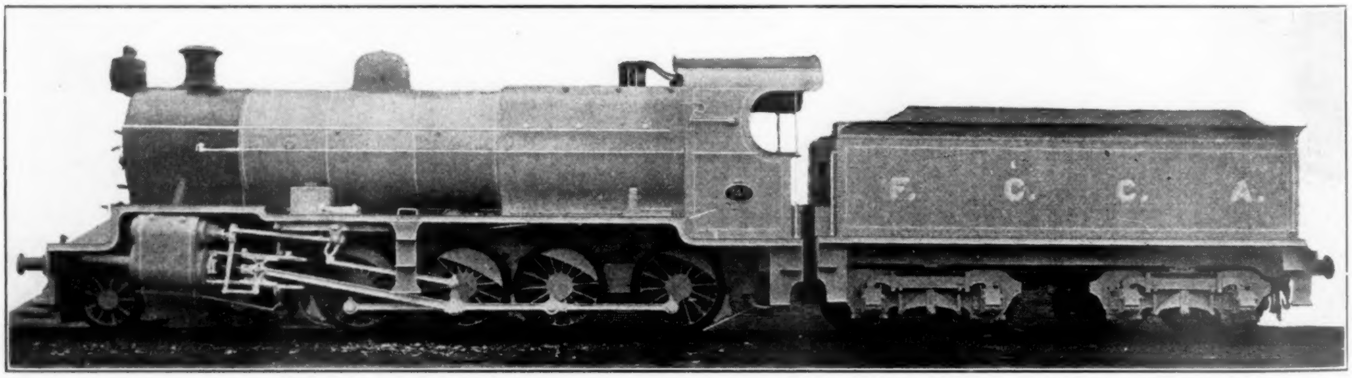
Lying close to the administration building are the electrical transformer substation, the pump houses and the elevated tanks for the shops' water supply. There are four main buildings in the shop system, viz., the pattern shop, the pattern storehouse, the machine shop and foundry. The foundry is 315 feet long and contains three bays which give it a width of 125 feet and a floor area of nearly 39,000 sq. ft. The pattern storehouse is protected with automatic sprinklers. The blacksmith shop is 80 ft. by 340 ft. and equipped with 19 double and 14 single forges, 8 steam hammers and a battery of electrically driven power hammers, 6 oil furnaces and a section fitted with complete spring making and repairing machinery. The latter department, due to the scarcity of steel for the leaves of springs, has had a rather hard time of it during and since the war, the engineering



A Grain Elevator on the Parana River at Rosario, Argentina

department having had to resort to all kinds of methods to "get by," even to changing styles and sizes in order to utilize what small stocks of spring steel they could get.

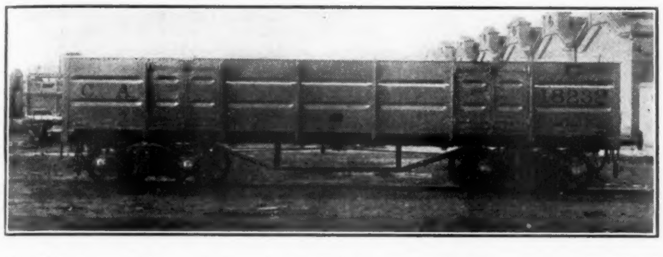
The machine shop, including erecting and tender shops and a section for coppersmiths, is 413 ft. by 1000 ft.—the installation covers more than 9 acres. The two locomotive erecting bays are served by two 50-ton cranes, and the rest of the shop is equipped with a number of traveling cranes of less capacity. The boiler shop is 165 ft. by 415 ft. and is equipped with three 25-ton traveling cranes. The paint shop for locomotives is 66 ft. by 348 ft. and has an underground storage system for the care of all paints and varnishes. The main stores building has a floor area of 32,243 sq. ft. and is equipped with a great quantity of labor saving machinery. The whole plant shows in its design a due regard to providing for future expansion, based upon the Central Argentine's previous record for continuous growth. Electric power for the entire works is supplied by the company's power house in Rosario and is carried to Perez by 3¼ miles of underground and 6½ miles of overhead cables at 20,000 volts. At Perez its three phase alternating current is reduced to 500 and 220 volts for power and lighting purposes respectively. The arrangements and equipment throughout



A Central Argentine Freight Locomotive Equipped with a Superheater

are of the best procurable. No expense seems to have been spared to make the plant complete and it stands forth as a monument to some individual's thorough understanding of the needs of the mechanical department of the road, which needs have for a decade been met in some supposedly more progressive countries by the crumbs which have fallen from the budget table.

In the completeness of the organization of this South American railway, the personnel department has not been overlooked. The company circulates its own "house organ" in Spanish and English every month. The publication is called the Central Argentine Railway Magazine. It is edited by the road's publicity department and contains in



A Modern Pressed Steel Gondola on the Central Argentine

some 50 pages all the latest news relating to additions, betterments and plans of the company, well illustrated with many photographs. There is also a "personal" department which covers the activities of the members of the staff of thousands of employees. The publicity department is responsible also for the time tables which are unique and—if the reader will pardon another admonition—teach another lesson to the American railroad man. These "horarios," as they are called in the language of the country, not only provide time tables, but contain many illustrations and descriptions of places along the lines with a comprehensive and easily read map of the entire system. Interspersed with this material are advertisements by concerns along the railway, which advertisements are not only unobjectionable, but, on the contrary, are highly instructive and serve to help the company pay for the printing cost.

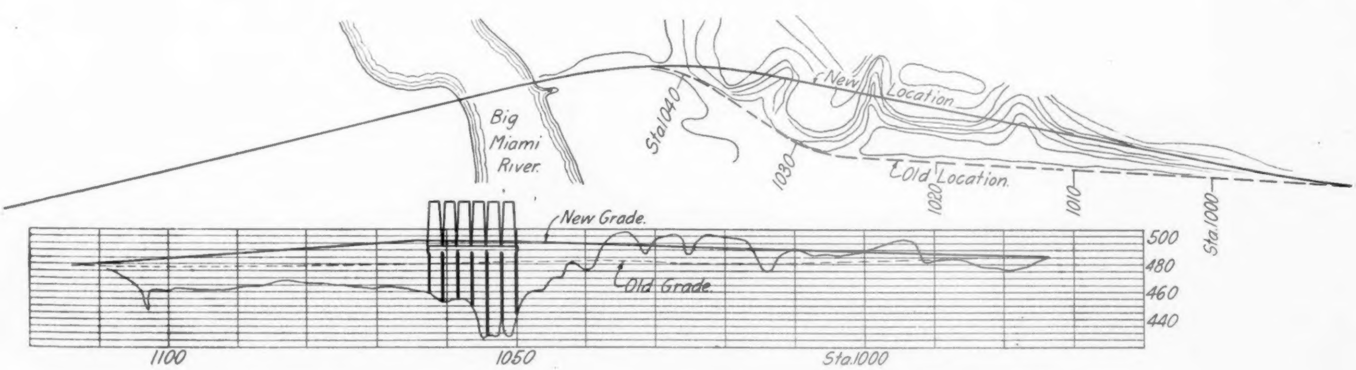
Baltimore & Ohio to Build Large Bridge

One of the most important railway bridge projects recently undertaken is that being carried out by the Baltimore & Ohio at Lawrenceburg, Ind., on the main line between Cincinnati and St. Louis. It consists in the renewal of the existing bridge over the Big Miami river with six spans of double-track, through riveted Warren trusses, each 206 ft. 2 in. center to center of end pins. In addition there will be two 45 ft. double-track deck plate-girder approach spans at each end. The total estimated weight of the steel work is 8,000,000 lb. One feature of the superstructure is the large operating clearance provided. The trusses of the through spans are spaced 30 ft. in the clear, thus providing for tracks at 14 ft. center to center with side clearances of 8 ft. The vertical clearance is 25 ft. above base of rail.

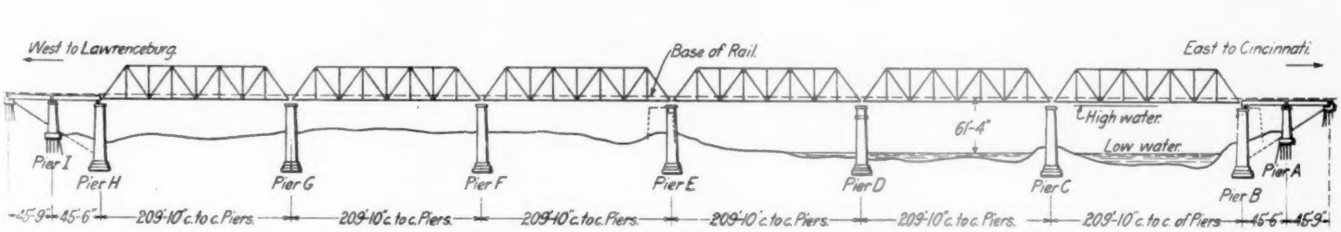
The project entails a raise of grade of about 10 ft. above the old rail level, and this change necessitates a relocation of the east approach so as to afford support for the new grade against the hillside. This is indicated on the map.

The substructure forms the most formidable part of the project and will be entirely new except for the use of one old pier (Pier D) which will be extended for second track and raised to the new grade. All of the piers supporting the truss spans will be carried to natural foundations by the means of the pneumatic process. The two abutments and the piers A and I under the girder spans will be carried on concrete piles. The caissons for all of the piers except the one embracing the old pier will be constructed of reinforced concrete.

The contract for the fabrication and erection of the superstructure has been awarded to the American Bridge Company. The masonry and grading contracts have been placed with the Vang Construction Company, Cumberland, Md. The entire project is under the general charge of H. A. Lane, chief engineer of the Baltimore & Ohio, Baltimore, Md.; the fabrication and erection of the superstructure is being performed under the immediate supervision of P. G. Lang, Jr., assistant engineer of bridges, while the steel work is in the hands of A. H. Griffith, district engineer, Cincinnati, Ohio.



Location Map and Profile, New Baltimore & Ohio Bridge



General Elevation of the New Baltimore & Ohio Bridge

Operating Statistics for December and 1920

The Interstate Commerce Commission has issued a summary of operating statistics for the month of December, 1920, of roads having annual operating revenues in excess of $25,000,000.

Some of the principal items shown in the statement are as follows (including mixed and special train service):

Region and name of road		Net ton-miles (millions) 1920	1919	Net ton-miles per loaded freight car-mile 1920	1919	Car-miles per car-day 1920	1919	Net ton-miles per car-day 1920	1919
New England Region:									
Boston & Albany	December	116	114	25.5	20.5	32.2	27.7	504	414
	12 months	1,592	1,421	24.9	22.0	27.9	31.4	478	490
Boston & Maine	December	287	304	26.2	22.9	16.3	16.0	288	276
	12 months	3,920	3,465	24.8	23.2	16.6	17.5	294	297
New York, New Haven & Hartford	December	250	263	25.2	21.0	12.8	12.5	209	208
	12 months	3,078	3,320	23.9	23.0	10.6	14.0	185	244
Great Lakes Region:									
Delaware & Hudson	December	357	328	36.3	35.3	28.6	27.2	663	652
	12 months	4,468	3,714	35.5	35.5	27.9	26.7	662	618
Delaware, Lackawanna & Western	December	453	416	29.0	27.0	33.4	30.0	621	564
	12 months	5,355	5,030	28.8	29.1	29.5	28.1	592	577
Erie (Including Chicago & Erie)	December	1,011	973	32.1	29.7	30.4	30.1	636	606
	12 months	11,936	10,723	29.5	28.6	26.3	31.6	536	605
Lehigh Valley	December	534	486	32.9	29.2	25.9	21.7	527	437
	12 months	6,484	5,925	31.8	30.4	21.9	2.29	480	487
Michigan Central	December	339	455	25.6	23.9	25.7	19.3	400	351
	12 months	4,881	4,679	24.5	21.2	20.7	24.4	370	378
New York Central	December	2,031	1,905	30.8	25.7	25.3	23.0	456	430
	12 months	24,610	21,664	28.5	26.0	23.0	24.1	432	425
Pere Marquette	December	194	200	27.7	24.2	18.8	14.5	331	261
	12 months	2,677	2,555	26.5	24.3	16.2	17.6	325	319
Pittsburgh & Lake Erie	December	223	222	42.5	41.8	10.3	10.8	285	307
	12 months	2,414	2,244	42.3	41.2	8.8	9.4	253	255
Wabash	December	404	416	26.8	24.4	27.6	22.8	504	466
	12 months	4,927	4,206	25.3	23.6	27.0	26.2	526	469
Ohio-Indiana-Allegheny Region:									
Baltimore & Ohio	December	1,689	1,596	36.2	32.8	24.0	23.0	497	524
	12 months	21,667	17,994	34.9	33.0	24.5	23.0	566	502
Central of New Jersey	December	233	201	36.0	32.5	13.9	13.1	290	269
	12 months	2,672	2,448	34.2	33.0	13.9	13.5	299	277
Cleveland, Cincinnati, Chicago & St. Louis	December	562	622	31.1	26.3	28.3	30.2	479	566
	12 months	6,929	6,502	29.0	27.7	28.3	27.8	540	530
Pennsylvania System	December	4,358	3,575	37.4	31.3	23.8	18.1	518	393
	12 months	51,971	49,009	34.9	35.3	20.2	19.5	466	449
Philadelphia & Reading	December	657	496	39.5	35.2	22.6	17.6	540	438
	12 months	7,299	6,466	38.3	37.4	20.0	18.9	510	471
Pocahontas Region:									
Chesapeake & Ohio	December	995	813	43.8	38.7	29.5	27.1	718	638
	12 months	12,456	10,264	41.5	40.1	35.0	26.1	878	625
Norfolk & Western	December	906	875	44.5	40.9	30.8	27.7	754	712
	12 months	11,670	10,631	42.1	39.7	34.3	28.9	909	715
Southern Region:									
Atlantic Coast Line	December	314	347	22.2	20.8	23.5	24.5	309	334
	12 months	3,844	3,674	21.6	21.3	23.1	21.2	338	310
Illinois Central	December	1,441	1,198	32.8	27.5	37.7	32.4	713	640
(Incl. Yazoo & Mississippi Valley.)	12 months	17,489	13,353	29.7	26.8	40.9	32.5	805	607
Louisville & Nashville	December	836	731	32.9	29.3	27.3	26.4	532	512
	12 months	10,027	9,061	30.5	29.0	30.6	25.6	613	508
Seaboard Air Line	December	211	237	23.7	23.1	24.0	20.5	360	345
	12 months	2,839	2,394	23.2	22.1	22.4	20.6	370	327
Southern Railway	December	685	795	26.6	23.6	22.5	21.1	382	383
	12 months	9,362	7,465	23.9	22.2	23.7	20.8	406	345
Northwestern Region:									
Chicago & North Western	December	917	795	30.8	23.9	22.6	18.6	406	308
	12 months	11,651	9,931	26.3	24.0	21.5	20.1	377	326
Chicago, Milwaukee & St. Paul	December	776	1,054	26.0	24.6	24.2	22.2	394	411
	12 months	12,963	12,862	25.5	24.6	26.3	26.4	461	457
Chicago, St. Paul, Minneapolis & Omaha	December	125	187	25.0	25.9	19.1	19.7	317	373
	12 months	1,858	1,807	23.9	23.9	22.2	20.9	393	348
Great Northern	December	577	693	29.5	27.1	16.5	20.5	315	424
	12 months	9,565	9,071	28.9	28.5	26.7	23.2	525	456
Minneapolis, St. Paul & Sault Ste. Marie	December	233	293	24.9	21.5	18.6	26.2	286	414
	12 months	3,637	3,409	23.7	22.3	26.3	24.9	455	408
Northern Pacific	December	564	630	28.3	26.5	22.7	25.3	392	487
	12 months	8,860	8,430	27.3	26.7	32.8	27.4	634	522
Oregon-Washington R. R. & Navigation Co.	December	130	109	29.2	25.5	21.8	20.1	479	393
	12 months	2,052	1,724	28.4	26.2	29.3	26.4	636	523
Central Western Region:									
Atchison, Topeka & Santa Fe	December	924	1,113	24.4	23.3	31.8	29.1	442	481
	12 months	12,782	11,997	22.8	22.1	33.5	29.2	514	451
Chicago & Alton	December	183	175	28.2	25.5	23.7	22.6	379	396
	12 months	2,358	2,112	27.2	25.9	23.4	22.6	418	379
Chicago, Rock Island & Pacific	December	633	757	25.5	25.7	25.9	20.8	424	412
	12 months	8,776	7,871	24.5	23.7	26.7	23.9	468	411
Chicago, Burlington & Quincy	December	1,232	1,169	31.5	27.6	30.9	24.4	554	484
	12 months	16,380	14,179	28.8	26.8	31.8	27.1	611	497
Denver & Rio Grande	December	184	219	31.1	28.5	17.6	19.0	371	390
	12 months	2,226	1,992	29.4	28.5	20.0	15.8	402	305
Oregon Short Line	December	226	221	31.5	27.8	25.8	34.2	526	674
	12 months	3,471	2,921	29.6	27.1	43.5	35.0	888	664
Southern Pacific	December	707	792	25.2	26.1	37.0	33.3	552	609
	12 months	10,201	9,546	25.3	25.6	35.5	33.5	629	595
Union Pacific	December	710	751	27.6	26.4	50.3	52.2	893	968
	12 months	9,940	9,028	24.7	23.7	69.8	58.4	1,229	978
Southwestern Region:									
Missouri, Kansas & Texas	December	163	220	26.5	27.2	25.9	28.2	350	488
	12 months	2,246	2,090	24.1	23.7	28.2	25.1	411	370
Missouri, Kansas & Texas of Texas	December	129	90	26.1	23.3	21.4	12.2	314	194
	12 months	1,441	1,223	24.8	23.5	18.1	13.1	289	198
Missouri Pacific	December	670	701	28.3	26.1	22.2	22.6	400	444
	12 months	9,030	7,606	27.1	25.3	22.8	22.0	453	406
St. Louis-San Francisco	December	373	394	27.1	26.5	21.0	19.2	352	343
	12 months	4,936	4,508	26.0	25.1	21.1	19.1	370	329
Texas & Pacific	December	178	146	23.9	22.4	25.4	15.9	390	262
	12 months	1,988	1,813	23.5	22.9	22.2	18.7	360	300

Bureau of Statistics, February 25, 1921.

State Rate Question Argued in Supreme Court

Forty-Two State Commissions Protest Against Centralization and Attack Transportation Act as Unconstitutional

WASHINGTON, D. C.

THE POWER of the Interstate Commerce Commission to prescribe statewide schedules of rates for intrastate traffic for the purpose of removing discrimination against interstate commerce, was contested and defended in briefs filed in the Supreme Court of the United States on February 28 by representatives of 42 state railroad commissions and of the railroads. The test case is an appeal by the railroad commission and state authorities of Wisconsin from a decision of the federal district court for the eastern district of Wisconsin enjoining the state officials from interfering with the establishment by the railroads of the increased passenger fares ordered by the Interstate Commerce Commission. Oral arguments in the case will be heard by the court later in the week or the early part of the coming week. Briefs on behalf of the railroads were filed by Alfred P. Thom, general counsel for the Association of Railway Executives, and by Bruce Scott, general solicitor, and Kenneth F. Burgess, general attorney, of the Chicago, Burlington & Quincy. A brief on behalf of the 42 states as amici curiæ was filed by John E. Benton, general solicitor of the National Association of Railway and Utilities Commissioners, and A. E. Helm, commerce counsel of the Kansas Court of Industial Relations, in addition to that of the Wisconsin commission.

The Broad National Purpose of Congress

"In this case," said Mr. Thom in his brief, "there is brought to the bar of this court the broad and reasonable policy adopted by Congress to deal with the entire subject of transportation from a national standpoint and to provide for its adequacy and competency, in the interest of all the people, by a system which will foster and preserve its instrumentalities in full vigor and will create equality of commercial opportunity and privilege as between all its users, irrespective of their location and irrespective of the markets which they seek to reach."

Mr. Thom argued that either the commerce power, the war power or the power to establish postoffices and postroads. standing alone "is adequate to sustain the validity of the power exercised by Congress with reference to the state rates of carriers engaged in interstate commerce."

In respect to the war power, he said in part:

"This court has held, in the case of Northern Pacific Railway Company vs. North Dakota, that the war power of Congress extends to the regulation of intrastate rates. The power in the case just referred to was exercised during a state of actual hostilities. But the war power does not exist only during the war. It likewise, in order to be adequate, must extend to all reasonable measures of preparation. Thus there can be no doubt that the war power includes the power of reasonable preparation and organization for the purposes of national defense. We accordingly submit that the following propositions cannot be successfully questioned:

"That the war power of Congress under the Constitution is not confined, in its exercise, to an actual state of war or to dealing with the consequences of actual war, but also includes all measures of proper, reasonable and adequate preparation for war.

"That the existence of an adequate and competent system of transportation, both rail and water, reaching and making available the national resources for supplying and provisioning armies and navies and transporting troops and munitions of war is essential to the effective and successful exercise of the war power and the performance of the war duty, and is so closely and directly related to the power itself as to become an integral part of it.

"That coming under the due and reasonable exercise of the war power, Congress may in its discretion, as a means of fostering and promoting in full vigor these essential agencies, control and regulate, within constitutional limitations, their rates and charges, both state and interstate—otherwise it would be in the power of the states to obstruct and defeat the war power which the states themselves conferred upon Congress and the exercise of which, for the protection of themselves and their people, they have the right to exact from Congress."

Mr. Thom said that the rights of the states are of two kinds: the rights they reserved when they entered the union and the rights they acquired by the compact of the Constitution when they entered the union. Among the latter was the right to have the federal government regulate the commerce in which all are interested.

"The commission is given the power, and it is made its duty, to protect the body of interstate and foreign commerce against undue or unreasonable preferences, prejudices and discriminations created by the act of a state or under its authority. It takes no argument to show, if the revenues permitted by a state from state traffic do not bear a proper relationship to the revenues which Congress in this act has required the commission to provide from interstate commerce, that there is an unjust and hurtful discrimination against interstate commerce."

Messrs. Scott and Burgess in a joint brief contended that in enacting the Transportation Act, Congress provided a comprehensive plan of railroad regulation in the national interest to avert a crisis threatening the transportation of the country upon termination of federal control. They also contended that Congress can control both intrastate and interstate rates when they are so intermingled that adequate regulation of the latter necessitates regulation of both.

Some extracts from this argument are as follows:

Correction of Discrimination a Necessary Part of Interstate Regulation

"The power of the Interstate Commerce Commission to require the removal of unjust discrimination and undue preference caused by intrastate rates lower than reasonable maximum interstates rates, has been upheld by this court in decisions dealing with both the constitutionality of the congressional action and the interpretation of the statute.

"Subsequent to the decisions Congress enlarged the power of the Interstate Commerce Commission in respect to intrastate rates by adding paragraphs 3 and 4 to Section 13, Interstate Commerce Act, as contained in Section 416, Transportation Act, 1920, approved February 28, 1920.

"Counsel for appellant contends that this section grants no new authority to the Interstate Commerce Commission with respect to unjust discrimination and undue preference, and the same argument was presented to the Interstate Commerce Commission.

"In the new section Congress both sets a statutory standard for intrastate rates, and authorizes the commission, on finding the facts of departure from that standard, to prescribe the intrastate rates 'thereafter to be observed.' Yet appellant contends that the section adds nothing.

"Congress enacted the Transportation Act, during the period of federal control of railroads. The act had the declared purpose of providing for the relinquishment and the return to private operation under such public regulation and protection as would insure adequate transportation service to the whole country.

"As to the regulation of rates, the final rule enacted by Congress was that initial jurisdiction over regulation of intrastate rates should be returned to the states and should continue there unless and until the Interstate Commerce Commission in the exercise of newly granted administrative powers, should on appropriate complaint and hearing find any unjust discrimination against interstate commerce or undue prejudice against persons and localities to exist, in which event the Interstate Commerce Commission should prescribe the intrastate rates necessary to remove such discrimination or prejudice, which should thereafter be observed, 'the law of any state or the decision or order of any state authority to the contrary notwithstanding.'

"In order to accomplish the result desired, Congress hit upon the plan of dividing the railroads of the country into convenient groups for rate-making purposes, and providing for a basis of rates in each group which would yield a fair return upon the value of the property of the carriers devoted to transportation purposes, the rates so made to be reasonable from the viewpoint of both the users and proprietors of the railroad plants.

"It was conceived that the success of the plan made it essential that some regulating body should initiate and establish rates within the rate group, which would be just and reasonable to the public, and, at the same time, would yield the revenue necessary to avert a breakdown of transportation throughout the country. It was manifest that these important functions must have final lodgment in a single regulating body, since unity of action and harmony of purpose were essential to success. It was known to the Congress that the great preponderance of the business of the country was interstate commerce, and that there could be no doubt as to the power of Congress under the Constitution, to intrust these important matters to a federal body. It was obvious, therefore, that the Interstate Commerce Commission, which had been long functioning to the satisfaction of the country, which was informed by experience and enlightened by a great body of expert knowledge, which was administering the Valuation Act, and familiar with the rate structure of the country, should be selected as a governmental agency intrusted with the duty of dividing the country into rate groups, of ascertaining the value of property within such groups, and fixing the rate of return. No single state commission could have been selected. Nor could these matters have been intrusted to all the state commissions acting separately, since to do so would have been to create 48 rate groups with 48 different bases of rates, and the possibility of 48 different standards of measuring the value of the property, and the necessary rate of return. The problem was manifestly a national one. In the light of the formation of rate groups state lines could not be considered.

"In the actual limitation of rates within the groups and on the basis so prescribed, Congress for the first time placed the Interstate Commerce Commission under the mandate of prescribing in the first instance the rates applicable to that portion of the commerce which was interstate. As to the rates on intrastate commerce, Congress yielded to the urgent solicitation of some of the states by returning to the states a portion of the duty and responsibility which they had had in respect thereto prior to federal control. This it did by omitting from the new legislation a direct mandate upon the Interstate Commerce Commission to prescribe intrastate rates in the first instance. But in so doing, Congress was careful to prescribe a standard to which the states must adhere—that the rates maintained or initiated by them should not result in disadvantage or prejudice against persons or localities in interstate commerce or in 'any unjust discrimination against interstate commerce' itself.

"Having in mind the distinction of the Minnesota Rate Cases, Congress did not authorize the court to determine when such variance from the standard might exist, but intrusted its determination as a question of fact to the Interstate Commerce Commission—not as a question of law to the judiciary.

"It is impossible to read Section 15a (Sec. 422, Transportation Act) and Section 13 (Sec. 416, Transportation Act) of the Interstate Commerce Act as they stand today, each in the light of the other, and both in the light of the underlying purpose of Congress, and arrive at any other conclusion than that Congress had determined the time had arrived when the interstate and intrastate transactions of interstate carriers had become so intermingled as to require ultimate responsibility for both to be within the realm of national supervision.

"Thus, a failure on the part of the states to follow or decline to follow the lead of the Interstate Commerce Commission might or might not result in preferences and discrimination, dependent upon the particular facts in particular cases, and the justification which might exist therefor."

After an exhaustive discussion of the commission's order itself, the brief says no one has ever demonstrated why the intrastate rates should be lower than interstate rates, when, transportation conditions being similar. If such demonstration were made in any particular case doubtless the commission would give recognition by appropriate differences in the rates prescribed. No one has ever suggested any reason why the intrastate rates should fail to produce their proportionate share of such increased revenue as Congress might determine was necessary to keep open and in successful operation the railroads engaged in interstate commerce.

Nine States Reduced Revenues by $41,000,000

The brief says that the reports of the commission show that the annual direct loss in revenue of which the carriers in nine states have been deprived by the failure to allow the full amount of increase amounted to $41,680,256, which would be greatly increased if the intrastate rates were reduced to the maximum of 2 cents a mile prescribed by the unrepealed state statutes in some of the states, and the indirect losses resulting from the use of lower intrastate rates to portions of interstate transportation, the commission found could not be measured in terms of dollars.

Brief of State Commissions

In explaining the interest of state regulatory commissions in this case, the brief filed on behalf of the 42 states says:

"The state regulatory commissions joining in this brief seek to preserve power to serve the people of their respective states in the manner prescribed by their laws. The Transportation Act of 1920, as construed by the Interstate Commerce Commission, destroys the power of such commissions, and of the legislatures of their sales as well, to regulate intrastate commerce.

"Already the commission has made state-wide orders dispossessing the states of New York, North Carolina, South Carolina, Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Nebraska, Arkansas, Montana and Utah of power over substantially all passenger fares. Like orders have been made covering freight rates in the states of Indiana, Illinois and Nebraska. The commission has also instituted proceedings looking towards like orders with respect to freight rates or passenger rates, or both, in the states of Georgia, Alabama, Florida, Missouri, Kansas, Louisiana, North Dakota, Texas, Nevada and Arizona. The orders made by the commission, by the provisions of the act, and by the express terms of such orders, are 'to remain in force until the further order of the commission.' Such orders, therefore, in their operation, are not confined to the removal of discriminations existing at the time of the making of the orders, leaving in existence state power thereafter to regulate rates upon the traffic affected, but result in the permanent destruction of all state power over such rates.

"While these orders of the commission thus far made under the Transportation Act relate to passenger fares and freight rates only, it may be said that all power of regulation is involved. Section 13 (4) of the Interstate Commerce Act, as amended by the Transportation Act, under which the orders of the commission have been made, authorizes action with respect to any 'rate, fare, charge, classification, regulation or practice' which causes 'undue, unreasonable or unjust discrimination against interstate commerce.' If it shall be held in this case that the commission can find a rate prescribed by state law discriminatory, and make an order setting the same aside, because in the opinion of the commission it is too low, and so burdensome to interstate commerce, it will be claimed that the commission may make a like finding and order as to any regulation requiring the provision of terminal or station facilities, or the furnishing of equipment or the making of improvements to safeguard life, or the doing of anything that requires the expenditure of money; and thus, if that claim shall be sustained, the power to regulate carriers in any respect, as to their intrastate operations, will be found to have been transferred from the states to the federal government.

"The state regulatory authorities jointly in this brief, therefore, believe it to be their duty to press upon the attention of the court the revolutionary character of the power which the commission has attempted to exercise in this case, and to urge that no such construction as the commission has placed upon the Transportation Act can have been within the intent of Congress, and, further, that if such construction can be held in accord with such intent, then the act in unconstitutional, as an invasion of the reserved power of the states under the federal compact."

A large part of the brief attacks the general rate-making rule of the act providing for a net return of 5½ or 6 per cent on aggregate value. After quoting the direction to the commission to exercise its power to prescribe just and reason-

able rates so that carriers shall earn a return "as nearly as may be" to the fixed percentage it is contended that Congress by this intended only to command the commission in adjusting rates to do what it could to enable carriers to earn the income prescribed by the exercise of its power to regulate interstate rates. If the rates prescribed by state authority should chance to be too low, and because of that fact the net railway operating income should fall short of producing a fair return on the aggregate value of all carrier property, it is contended that this would still be "as nearly as may be" to that return by reason of anything that the commission may do.

The rule of Section 15-a is declared to be arbitrary in its operation as to traffic on roads which through lack of traffic are unable to earn a fair return at reasonable rates.

The brief says in addition:

"The commission is commanded, under the rule as construed, to establish rates which shall yield a fixed percentage return. The level of rates that will produce this return is thus by legislative mandate declared reasonable, without respect to the worth of the transportation service rendered, or to the effect of the rate on traffic. Under this rule, in times of business depression, when prices fall and the volume of transportation decreases, rates must be advanced without regard to the worth of the service rendered.

"Paragraph 5 recites in substance that the plan will enable 'some of such carriers to receive a net railway operating income substantially and unreasonably in excess of a fair return upon a value of their railway property held for and used in the service of transportation.' Later paragraphs of the section provide that the excess above a fair return so collected by a road shall be divided equally between the road and the government.

"This rule operates to impose upon the internal traffic of a state, moving upon the lines of such carriers as earn excessive returns, the payment of charges which, as to such traffic, is unreasonably in excess of fair payment for the transportation service rendered.

"If it be admitted, for the purpose of this argument on this particular point, that non-compensatory rates upon intrastate traffic may weaken interstate carriers, and so retard or otherwise injure interstate commerce that the federal government may require the same to be increased, this does not reach the situation under discussion. Power to raise rates that are non-compensatory in a very different thing from power to raise rates that already yield a fair return on the value of the property used, to a point where they will yield 'substantially and unreasonably in excess of a fair return on such value.'

"The federal power with respect to intrastate rates is dominant only to the extent that its exercise is necessary to protect interstate commerce from injury. When the returns yielded by rates in effect are adequate there can be no weakening of carriers, nor injury to interstate commerce from failure to increase them, and hence the federal power never becomes dominant as to such rates.

"Laying aside for the moment the question of constitutionality of Section 15-a, it may be pointed out that the construction which the commission has placed upon it goes far beyond the design of Congress. Congress was not seeking to establish uniform rates upon all traffic. It was, so far as interstate rates were concerned, seeking to establish as the basis for determining the sufficiency of such rates, group values instead of values of particular properties.

"Paragraph 5 does not contemplate 'uniform rates' upon all traffic, but 'uniform rates upon competitive traffic.' There may be ground for argument that it is good policy for the federal government upon competitive traffic to allow some roads to earn more than a fair return, so that weak competing roads may be sustained. But the competitive traffic is ordinarily through traffic, which passes state lines, and is so subject to federal regulation. Intrastate traffic, on the other hand, in very large part, is not competitive, being often confined to a single route.

"We maintain, however, firmly that the public policy which shall control in the regulation of carriers, so far as such carriers are engaged in the transportation of intrastate commerce, must be determined by the state and not by the federal government. If it be granted, for the sake of argument at this point, that a failure to permit reasonable returns upon the intrastate business of an interstate carrier may be found to constitute unjust discrimination, such discrimination can be found only when the return upon the value of the property devoted to such transportation is in fact unreasonable.

"If it is claimed to be good policy to go beyond what is reasonable in some cases, it is the constitutional right of a state to determine that question for itself. Its determination may be unwise, but it alone has the right to make it.

"The commission's misconstruction of the true purpose of section 15-a as to uniformity of rates produced the order complained of in this case. We have before called attention to the entire failure of the commission to make definite the persons and localities, if any, injured by the intrastate rates sought to be displaced by its order. If the commission found all intrastate passenger fares in Wisconsin in fact discriminatory it would undoubtedly, in view of the decision of this court in Illinois Central Railroad v. Public Utilities Commission, 245 U. S., 493, have clearly stated that finding, as it might easily have done. Instead, however, it has expressly left open the question of what rates are discriminatory and what rates are not discriminatory. Doubtless for the purpose of most expeditiously exercising the new power which the commission believes has been committed to it, it has applied Mr. Ford's methods, and has standardized its reports. Having stated its conception of the law, and its methods of procedure, in the New York and Illinois reports, which are part of the record here, it has since contented itself by reference to those reports, making its findings as to discriminations found in all the cases relating to the same class of traffic in the same form, and leaving the earlier reports to be examined for statements of reasons and of procedure."

It is asserted that the railroads desire to centralize regulation as much as possible because, being human, they resent interference and "a bureau in Washington hundreds or thousands of miles away from people who want to complain, and buried in thousands of complaints that would suffice to keep 48 commissions busy, comes as near to ideal regulation from the railroad point of view as can be imagined."

It is also asserted that the commission failed to comply with the law in not making a separation of the aggregate value of the railroads in the Western territory when it divided it into the Western and Mountain-Pacific districts for the purpose of the rate case, and also in failing to hold conferences and joint hearings with the Wisconsin Railroad Commission before ordering an advance in the Wisconsin rates.

Railroads to Receive Partial Guaranty Payments

WASHINGTON, D. C.

PRESIDENT WILSON on February 26 signed the Winslow bill, providing for partial payments to the railroads on account of their guaranty for the six months following the termination of federal control, on certificates to the Treasury Department by the Interstate Commerce Commission. The President announced his approval of the bill after having received opinions on it from both the commission and the Treasury Department. It is understood the commission fully approved it, as it had recommended such a bill in its annual report, and that the Treasury Department interposed no objection, now that the problem of raising the funds to meet the payments to the railroads is about to be transferred to a new administration.

The way is thus prepared for early payments to the railroads for a large part of the approximately $350,000,000 still due on their guaranty, and the railroads owe so many bills both to other railroads and to companies that have accounts against them for materials, supplies and equipment that it is expected that the relief afforded by the law will be widely distributed.

How much money will be made available and how soon depends on the Interstate Commerce Commission, which it is understood proposes to issue certificates as rapidly as possible for such amounts as it feels perfectly safe in certifying as certainly due the carriers pending final adjustments. The commission had prepared some certificates for partial payments which were withdrawn when it was advised that the comptroller of the Treasury had ruled that payments could not be made and officers of a large number of roads have been conferring with the Bureau of Finance since the passage of the new law in the effort to arrange for additional certifications to meet pressing needs as soon as possible.

President Wilson was urged to veto the Winslow bill as

"an unjust and unjustifiable concession to the railroad owners, who have shown a wanton disregard for law and lawful processes," in resolutions adopted by the executives of the national and international trade unions affiliated with the American Federation of Labor, at a conference in Washington on February 23. The resolutions also urged the legislative representatives of all organizations affiliated with the federation, in the event the President should veto the bill, to use every effort and all legitimate means to prevent the passage of the bill by the Congress over the Presidential veto. The resolution states that the railroads are seeking through this bill additional financial benefits from the Treasury to an amount and in a manner not contemplated by the original transportation act. The reason for this opposition to the bill is indicated in a preamble to the resolution saying that "the railroads, closely organized through the Association of Railway Executives, so that they stand as a unit in all matters pertaining to the relations between the carriers and the workers, have declined to meet in general conference the corresponding national organization of the workers," and that this is evidence of a purpose to destroy trade unionism that is identical with the so-called open shop movement in the steel industry and in violation of the Transportation Act.

When Congress adjourned on March 4 no action had been taken on the bills which had been favorably reported by the Senate and House committees as a substitute for Section 10 of the Clayton law, which became effective on January 1. The original bills introduced at the request of the railway executives' association have been largely rewritten in accordance with suggestions made by the Commission.

Another bill which was not acted upon was that proposed by the state commissioners' association and approved by the Interstate Commerce Commission to amend the railroad valuation act by eliminating the provisions requiring the Interstate Commerce Commission to ascertain and report the cost of acquisition of railroad land. A hearing on the bill had been held by the House committee on interstate and foreign commerce but no report has been made.

Freight Car Loading

Washington, D. C.

The number of cars loaded with revenue freight during the week ended February 19 shows a slight increase over that for the previous week, for the first time since January 15. The total was 695,506 as compared with 681,627 during the week ended February 12 and as compared with 772,102 and 700,913 during the corresponding weeks of 1920 and 1919, respectively. The summary as compiled by the Car Service Division of the American Railway Association is shown in the table at the bottom of the page.

Reports received by the Car Service Division show that on February 15, 64.1 per cent of the freight cars were on home roads, as compared with 58.9 per cent on February 1 and 21.9 per cent on March 1, 1920, when the railroads were returned. In a summary of general car conditions for the last half of February, the Car Service Division says that it is generally felt that the peak of the open top car surplus has now been reached and that after the first of March the demand for this class of equipment will progressively increase, not only for the transportation of coal and for manufacturing necessities but also with the renewal of building and road construction activities made possible by improved weather conditions. "Due to the lack of demand for open top cars and the observance of the car service rules," the circular says, "very satisfactory progress is being made in relocating such equipment to the home roads. These cars upon arrival home are being overhauled and repaired as fast as possible in anticipation of heavy transportation demand in the near future when business has resumed its normal proportions." There has, however, been a steady increase during the winter in the percentage of bad order cars reported. On February 1 the percentage was 9.4 per cent as compared with 8.5 per cent on January 1, 7.4 per cent on October 1 and 6.7 per cent on March 1, 1920.

The freight car surplus is steadily increasing and during the week ending February 23 it reached a point never before attained except during the period of depression following the armistice. The number of cars on the railroads of the United States for that week was 423,193 and for the railroads of the United States and Canada the number was 450,250. There were 172,713 idle coal cars and 203,817 idle box cars. During the spring of 1919 the car surplus at one time reached nearly 500,000 cars.

Officers of the Canadian National say that labor conditions, so far as railways are concerned, are improving. They anticipate that by the end of February a large number of men will be shipped out along the line for the commencement of spring work. Owing to the return of a large number of railway workers to Europe during the past few months, a shortage of such labor is looked for.—*Commerce Reports.*

REVENUE FREIGHT LOADED AND RECEIVED FROM CONNECTIONS

Summary—All Districts, Comparison of Totals This Year, Last Year, Two Years Ago, for Week Ended Saturday, February 19, 1921

Districts:	Year	Grain and grain products	Live stock	Coal	Coke	Forest products	Ore	Merchandise L.C.L.	Miscellaneous	Total revenue freight loaded: This year 1921	Corresponding year 1920	Corresponding year 1919	Received from connections: This year 1921	Corresponding year 1920	Corresponding year 1919
Eastern	1921	5,333	2,908	41,710	976	8,633	645	47,892	56,118	164,215	....	....	173,904	....	....
	1920	4,567	2,919	44,935	3,739	4,546	1,661	27,521	74,517	....	164,405	155,766	....	187,854	180,750
Allegheny	1921	2,061	2,936	45,259	5,341	3,501	3,376	34,829	50,637	147,940	....	....	97,224	....	....
	1920	2,230	3,358	46,175	3,560	3,707	2,223	34,699	65,494	....	161,446	144,087	....	121,467	124,804
Pocahontas	1921	155	77	13,119	72	1,470	35	2,478	5,143	22,549	....	....	12,506	....	....
	1920	133	87	17,936	766	1,835	279	148	9,579	....	30,763	25,676	....	18,465	17,241
Southern	1921	3,763	2,185	20,396	565	13,762	933	36,876	32,437	110,917	....	....	61,535	....	....
	1920	3,757	2,293	22,079	207	15,356	2,384	19,927	55,859	....	121,862	108,660	....	77,308	63,978
Northwestern	1921	8,879	7,840	5,914	1,381	17,633	1,176	24,615	26,337	93,775	....	....	42,605	....	....
	1920	10,096	7,730	12,296	1,057	20,385	1,562	20,444	39,074	....	112,644	122,316	....	56,242	57,228
Central Western	1921	11,013	10,157	16,234	252	2,959	5,067	24,237	29,437	99,356	....	....	42,739	....	....
	1920	10,565	10,382	22,147	402	5,612	6,486	18,850	45,473	....	119,917	95,414	....	66,190	55,247
Southwestern	1921	4,855	1,789	3,806	148	6,459	470	16,137	23,090	56,754	....	....	41,364	....	....
	1920	5,366	2,399	5,840	87	6,490	683	15,621	24,579	....	61,065	48,994	....	51,926	40,875
Total all roads	1921	36,059	27,892	146,438	8,735	54,417	11,702	187,064	223,199	695,506	....	....	471,877	....	....
	1920	36,714	29,168	171,408	9,818	57,931	15,278	137,210	314,575	....	772,102	....	....	579,452	....
	1919	32,387	38,250	141,273	....	60,104	21,074	....	407,825	....	....	700,913	....	....	540,123
Increase compared	1920	....	....	....	....	....	....	49,854	....	....	....	....	....	....	....
Decrease compared	1920	655	1,276	24,970	1,083	3,514	3,576	....	91,376	76,596	....	....	107,575	....	....
Increase compared	1919	3,672	....	5,165	8,735	....	....	187,064	....	....	....	....	....	....	....
Decrease compared	1919	....	10,358	....	....	5,687	9,372	....	184,626	5,407	....	....	68,246	....	....

L. C. L. merchandise loading figures for 1921 and 1920 are not comparable as some roads are not able to separate their L. C. L. freight and miscellaneous of 1919. Add merchandise and miscellaneous columns to get a fair comparison.

	Grain and grain products	Live stock	Coal	Coke	Forest products	Ore	Merchandise L.C.L.	Miscellaneous	This year 1921	Corresponding year 1920	Corresponding year 1919	Received This year 1921	Received Corresponding year 1920	Received Corresponding year 1919
February 12	32,879	27,456	151,786	9,026	53,882	8,094	184,892	213,612	681,627	786,633	687,128	488,983	610,331	537,109
February 5	36,875	31,277	155,917	10,381	54,066	8,501	182,221	217,759	696,997	762,680	692,614	495,860	599,454	551,312
January 29	39,830	32,368	162,652	9,749	53,677	7,693	179,123	214,844	699,936	803,332	718,297	489,184	589,838	577,709
January 22	46,695	35,255	168,453	11,177	49,159	7,991	176,581	207,804	703,115	804,866	734,293	491,640	589,000	608,751

Milton H. Smith

Milton H. Smith, president of the Louisville & Nashville Railroad, who died at Louisville, Ky., on February 22, was almost the last of the generation of railway executives to which he belonged. Perhaps the only exception which can be made to this statement is that of Marvin Hughitt, chairman of the Chicago & North Western, who became president of the North Western in 1887. The beginning of Mr. Smith's career as a railroad president antedated that of Mr. Hughitt's, Mr. Smith having become president of the Louisville & Nashville on June 11, 1884. He had, furthermore, been vice-president of the railroad since 1882, and in this position had been the chief executive officer of the property. Therefore, it can be correctly stated that he was the real head of the Louisville & Nashville for more than thirty-eight years.

Most of the development of the Louisville & Nashville into a great railway system occurred under his management. When he became vice-president in 1882 it had 3,233 miles of line, 364 locomotives and 10,762 freight cars. When he died it had 5,041 miles of line, 1,209 locomotives and 53,100 freight cars. Even these figures give a very inadequate idea of the development of the property under his management. It was, when he became the head of it, a small, poorly developed, inadequately equipped property. He left it one of the leading railways of the country in point of physical condition, strategic location, traffic handled and earning capacity. He deserves, therefore, to be ranked among the greatest railroad builders, developers and managers of his time.

M. H. Smith

Probably the country never produced a greater railroad administrator than E. P. Ripley, for many years president of the Santa Fe. The regard in which Mr. Smith was held by Mr. Ripley was strikingly shown by the following telegram which Mr. Ripley sent to Mr. Smith on September 12, 1916:

"Congratulations on long, useful and well spent life. This will be one of many, but there will be few from people who have known you so long as I have. We are both nearing the foot of the hill, but if I leave behind me as good a reputation as you will, it will be the best legacy I can leave to my children."

Mr. Smith was 84 years old at the time of his death. The great success of his career was largely due to the length of his active life, and the length of his active life and the enormous amount of work he did were largely due to the fact that nature endowed him with an unusually powerful natural constitution. He worked during most of his life without taking any form of recreation, and it has been said of him that he never learned until he was past 75 years old that the Louisville & Nashville trains would continue to run if he occasionally took an afternoon off to play golf. In the last years of his life he played golf and took more or less rest, but he continued to work hard right down to the last.

Like most of the successful railroad men of his generation, Mr. Smith was eminently a fighter. He fought everybody who opposed him and he usually won, but he fought fairly. He was distinctly "a diamond in the rough." He was rough in his external appearance and manner, but those who came intimately in contact with him all found that, like most men of his general type, he was really very kind-hearted and considerate.

Like many railway men of his generation, Mr. Smith was extremely averse to newspaper publicity and boasted that he was never interviewed. He had a keen sense of humor and a happy gift of sarcasm which were displayed in a letter which he wrote to one newspaper man who had published a story about him. He began by denying a statement that the newspaper man had made to the effect that he was 79 years old. Having challenged the correctness of almost everything else in the story, he concluded by saying: "You got one thing right, my name is Milton Hannibal Smith."

Mr. Smith was an intense lover of accuracy, and before his death dictated a memorandum giving in detail the correct chronology of his life. He was born on September 12, 1836, in Windham Township, Greene County, New York. He moved with his parents to Cook County, Illinois, in October, 1850. In 1858 he went south and lived in Tennessee and Mississippi until January 1, 1860, when he entered the employ of the Southwestern Telegraph Company as a telegraph operator at Oxford, Miss.

In October, 1860, he went to Jackson, Tenn., as assistant agent of the Mississippi Central Railroad and operator for the Southwestern Telegraph Company. In June, 1861, he was transferred to the superintendent's office of the Mississippi Central at Holly Springs, Miss., as telegraph operator and chief clerk.

He entered the employ of the United States Military Railroads in September, 1863, in charge of transportation at Stevenson, Ala. He performed the same duties at Chattanooga, Tennessee, during the Atlanta campaign of the Union Army, and afterwards also at Huntsville, Alabama, Knoxville, Tennessee, and Atlanta, Georgia.

In September, 1865, he went to Louisville and entered the employ of the Adams Express Company. In June, 1866, he went to Alabama as division superintendent of the Alabama & Tennessee River Railroad, returning to Louisville in August of the same year as local agent of the Louisville and Nashville Railroad. He was made general freight agent of that road in June, 1869.

In October, 1878, he went with the Baltimore & Ohio at Baltimore, and was subsequently made general freight agent, holding that position until October 1, 1881. He then became general agent of the Pennsylvania Railroad in New York, which position he resigned on January 1, 1882, to become third vice-president and traffic manager of the Louisville & Nashville. He was made chief executive officer of the road with the title of vice-president on July 6, 1882. He was elected president on June 11, 1884, and again served with the title of vice-president from October 6, 1886, to March 9, 1891. There was, however, no change in his duties

during this period. It was decided that the railroad needed stronger financial representation in New York and the title of president was given to one of its officers in New York. Subsequently this officer was given the title of chairman of the board, and Mr. Smith again took the title of president on March 9, 1891.

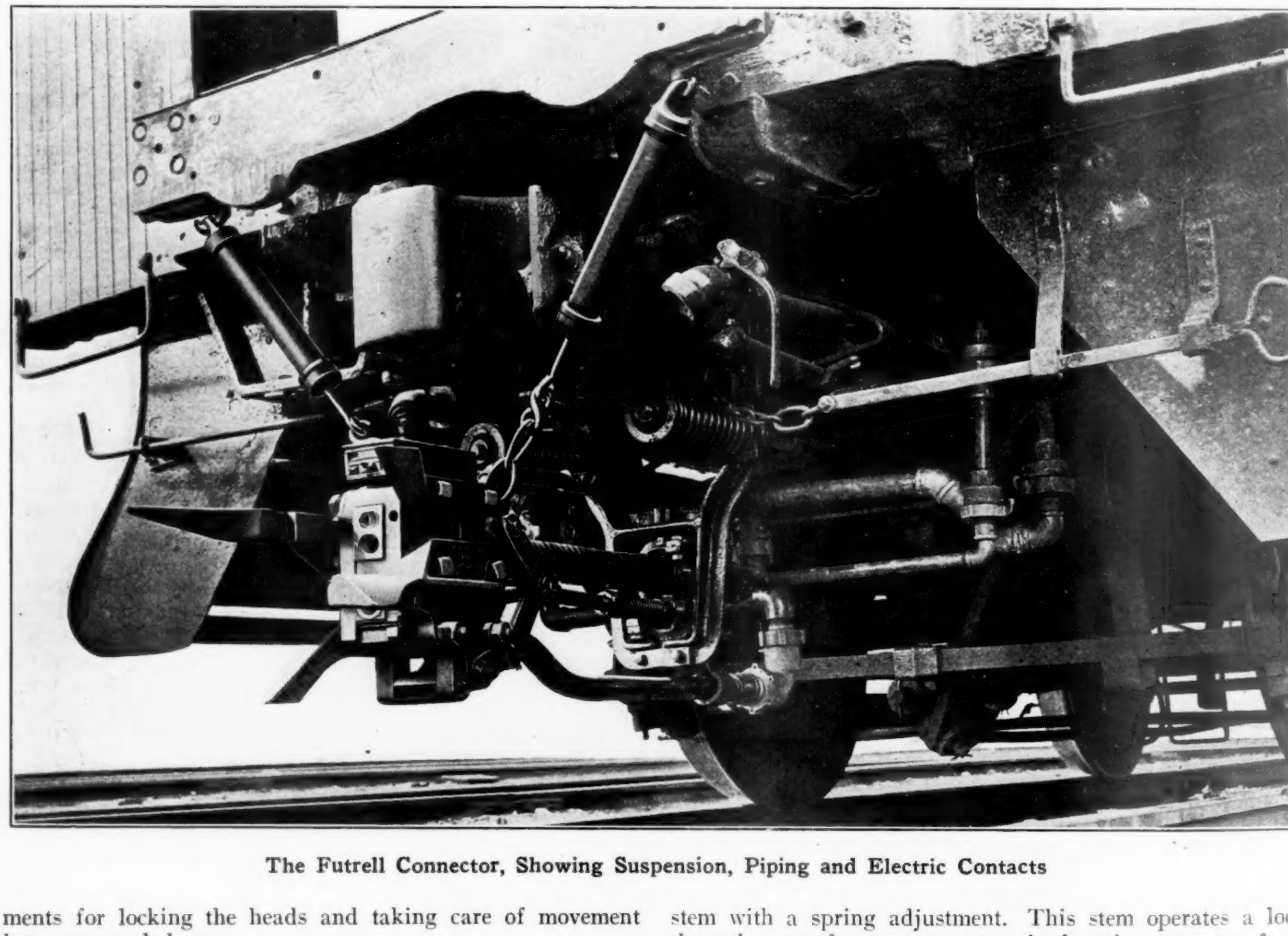
One of the principal officers of the Louisville & Nashville wrote to the *Railway Age:* "The biographical sketch heretofore furnished you was prepared by Mr. Smith himself, his idea being that if the newspaper men were absolutely accurate as to the essentials they might say anything else about him that their fancy might dictate." The same officer wrote: "He was such a wonderful man that it is hardly possible to say that he possessed any one outstanding quality or characteristic. His versatility knew no bounds. His genius sprang from an incomparable combination of rugged integrity, love of truth and extraordinary breadth of vision. I valued and admired him so greatly, and his life was such an inspiration to those who came in contact with him, that I am sure you cannot exaggerate his virtues and achievements."

The Futrell Automatic Train Line Connector

New Type Suspension, Positive Lock for Connector Heads and Removable Gasket Plate Are Features

During the past 18 months the Baltimore & Ohio has had in service on a local passenger train a new design of automatic connector. This device, which is the invention of Thomas J. Futrell, is made by the Futrell Coupler Company, Streator, Ill. While the construction follows the general principles of some of the existing types, there are several unique features, the most notable being the arrangestem which extends from the rear of the coupler head. Two springs attached to the bracket force the yoke forward and another spring is applied to the stem of the coupler head. These parts are adjusted so that the connector when not coupled extends 5¾ in. ahead of the pulling face of the coupler knuckle.

Beneath the main stem of the connector is an auxiliary



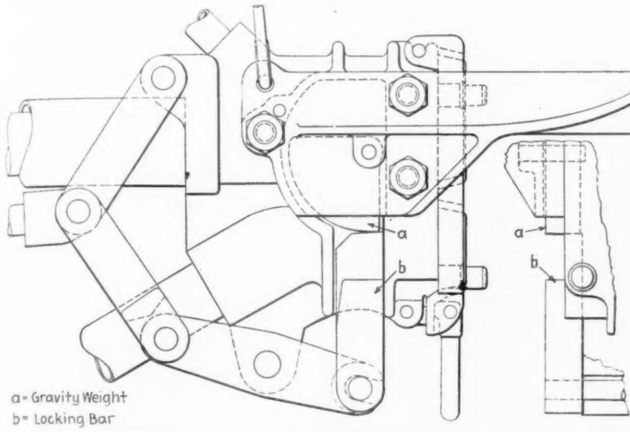
The Futrell Connector, Showing Suspension, Piping and Electric Contacts

ments for locking the heads and taking care of movement between coupled cars.

The coupler, as shown in the illustration, is of the buttface, wing type. The head casting is suspended beneath the coupler by diagonal wire cables which are supported by an enclosed spring mechanism from the car body. A bracket is attached to the center sill behind the coupler carrier iron and a yoke shaped lever, pivoted to the bracket, supports a

stem with a spring adjustment. This stem operates a lock through a toggle arrangement and after the connector faces are in contact the lock is caused to engage a slot in one of the wings as it mates with the coupler head. The details of operation of the locking arrangement are clearly shown by the drawing of side and front views of the head. In a recess in the head beneath the left side wing is a segment, *a*, pivoted near the upper edge. The portion of this segment lying

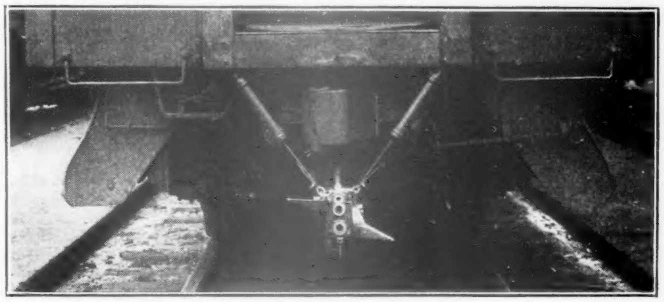
within the head serves as a stop for the locking bar, *b*. The lower outer edge of the segment extends into the guide in which the wing of the opposing connector engages the head. Thus as the wing moves in it will force the segment upward and release the locking bar, which is then free to enter the slot in the wing. When the connectors are separated the locking bar is returned to the lower position and the segment, being released as soon as the wing is removed, returns to its original position by gravity.



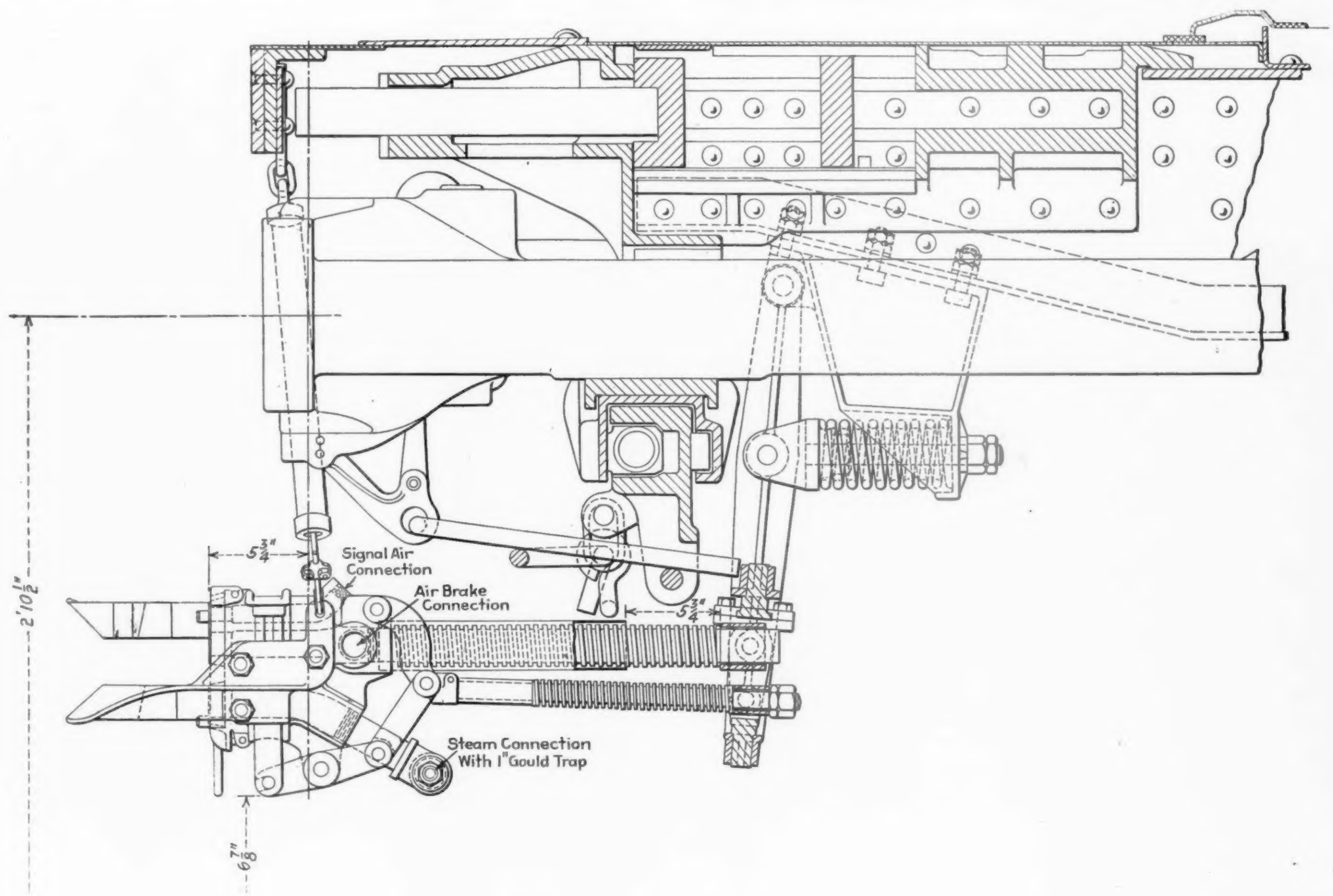
Side View of Head Showing Locking Mechanism

the relative movement between the ends of adjacent cars. The yoke shaped lever, being pivoted at the upper end, is free to move forward or backward to take up motion resulting from the compression of the drawbar springs and a trunnion casting between this lever and the stem of the coupler head provides for lateral and vertical movement.

The wing type gathering mechanism has a vertical range of 7 in. and a horizontal range of 7 in. On the earlier designs, four wings were used but the latest type has but two. An additional means of insuring perfect alinement in the head is provided by two pins in the face which register with recesses in the opposing connector head. As is the usual practice in this type, the ports are located on the vertical center line, the air signal connection being at the top; the air brake in the center and the steam heat at the bottom. The sizes of the openings are as follows: air signal 7/8 in.; air brake 1 3/8 in.; steam heat 1 1/2 in.



End View of a Car Equipped with the Connector

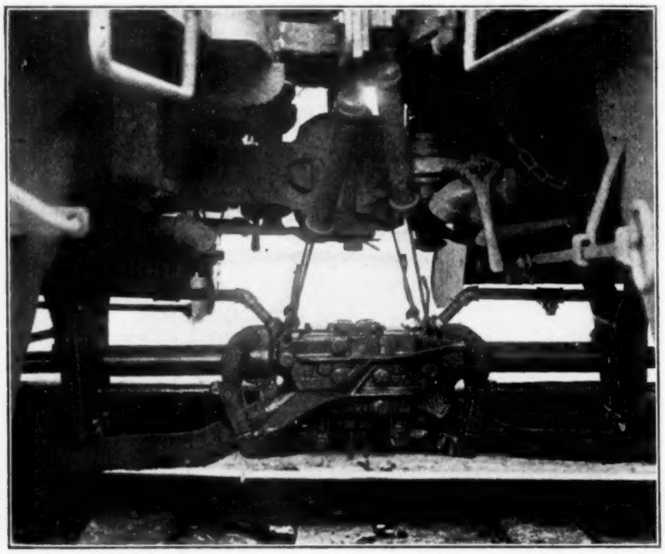


Side Elevation of the Connector Head and Suspension

The heads, when locked, form practically one solid part and since the connectors are supported from the car body, it is necessary to provide sufficient freedom of movement to insure that no additional stresses are placed on the heads by

The gaskets are held in place by a detachable gasket plate

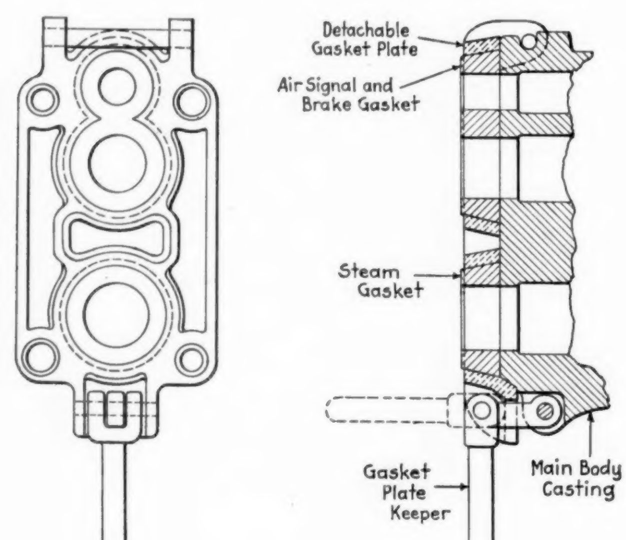
fastened to the front of the head. The plate is hinged at the top and is locked at the lower end by a cam which forms part of the gasket plate keeper. In order to remove the gasket plate, the handle must be raised to the position shown by the dotted lines. When the two connectors are coupled, the handle is held in the vertical position and there is no possibility of the plate becoming unfastened. It will be noted from the illustration that the gaskets are tapered to fit



A Side View of the Connectors in the Coupled Position

the plate and the air brake and signal ports have a single gasket in common. With slight changes in the gasket holder, A.R.A. standard air hose gaskets could probably be used. In the design of the head, provision has been made for the attachment of electrical connections at the top of the head casting.

All connections between the connector head and the train line are made by pipe and flexible joints, both the Barco and



Details of Removable Gasket Plate

McLaughlin type being used. In order to make the connections to the head, tees are inserted in the train lines behind the angle cocks. Ordinary air cocks are used in the air connections and a quick opening throttle valve in the steam passage. The levers for the operation of these cocks are placed toward the center of the car just behind the steps where they can be reached from the side without going between the cars. The piping and cocks to which the rubber hose are connected are not disturbed in the installation of the coupler and for that reason no other provision is made for interchanging with equipment fitted with the standard connections.

Advantages and Cost of Railroad Electrification

A MEETING of the Electrical Section of the Franklin Institute was held in Philadelphia, Pa., on February 24, which was addressed by A. H. Armstrong, of the General Electric Company. Mr. Armstrong called electrification an economic necessity and spoke of the need for developing railroad facilities. He said that it is a matter of grave national concern properly to diagnose the true character of the ailment affecting our transportation system, and to prescribe the treatment of greatest promise for its future recovery. He enlarged on the subject of how electric operation could best be used to meet future railroad requirements and told of what had already been accomplished.

In summing up his paper, Mr. Armstrong said that electrified terminals in large cities would revolutionize present steam locomotive practice and not only effect economies in operation, but greatly stimulate traffic by introducing radical improvements and facilities. With no immediate prospect in sight for any material reduction in the price of labor, its output must be increased, and electric operation has demonstrated its effectiveness in this direction. In addition, locomotive division points may be indefinitely extended. All of these improvements in the electrified property will cost large sums of money, although in some items of operating expense, such as fuel, crews and maintenance, direct savings are effected of such magnitude as to show a reasonable return upon new capital charges incurred. The argument for electrification, however, is built upon a broader foundation than a direct return upon the investment. It has to do with the vital question of the future growth of our transportation system and its effect upon our national prosperity.

In answer to several questions put to Mr. Armstrong relating to electrification costs and mileages, he said that the original 440-mile electrification on the Chicago, Milwaukee & St. Paul cost about $13,000,000. This included 42 freight and passenger and two switching locomotives. This, he said, figures out at about $28,000 per route-mile or $18,000 to $19,000 per single-track mile. The freight and passenger locomotive cost about $130,000 each, and they replaced 112 steam locomotives, worth about the same in total as the electrics; hence the items of locomotive costs about offset each other. The last 220-mile electrification on this road cost more, having been carried out in war time, the increase being, roughly, about 50 per cent.

BOLIVIA, Colombia, Honduras, Nicaragua and Peru are now included in the list of countries to which letters may be mailed at the domestic rate, two cents an ounce. Domestic rates apply also on second class matter. The weight limit on newspapers and other printed matter is 8 lb., 12 oz.; maximum weight for single volumes, 11 lb.; maximum dimensions of rolled papers, 40 in. in length by 6 in. in diameter.

THE CHICAGO, BURLINGTON & QUINCY has appointed a loss and damage committee to take charge of a campaign for reducing freight claims to a minimum. The company has prepared bulletins describing the work of the committee and calling for the co-operation of officers and employees in keeping down the number of claims, which, the bulletin states, represent "additional expenditure that buys criticism, complaints and extra work."

Labor Board Resumes Hearings on Working Rules

National Agreement with Clerks Is Defended—Other Proceedings Before Wage Tribunal

Hearings in the controversy between the carriers and various classes of their employees over the latter's demand for the perpetuation of the National Agreements formed during the period of federal control were resumed before the Railroad Labor Board at Chicago on March 1, when representatives of the Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees, appeared before the Board to justify the agreement made with the clerks and present their rebuttal statements.

The Board had previously announced that representatives of the maintenance of way workers would be heard on that date, but at the opening of the session Chairman R. M. Barton of the Board stated that the program had been rearranged and the clerks would be heard first.

The session was opened by E. H. Fitzgerald, grand president of the Brotherhood, who, after describing the history of National Agreements, spoke briefly of the necessity, from the employees' standpoint, of the Board's recognizing the principle of collective bargaining as defined by B. M. Jewell in the previous hearings. Mr. Fitzgerald contended that such action would end the present controversy and that it would be settled amicably.

The remainder of the testimony presented on behalf of the clerks dealt wholly with rebuttal statements to various parts of the presentation made by E. T. Whiter on behalf of the carriers. During the morning and afternoon sessions on March 1, R. P. Dee, vice-grand president, W. E. Gollings and J. F. Murray, general chairmen of the clerks' organization, testified in reply to certain groups of the objections to this National Agreement put forward by Mr. Whiter.

The character of the testimony offered at these sessions indicates the manner in which the labor executives propose to reply to the carriers' objections to National Agreements. If similar testimony is presented by each of the organizations involved, it will doubtless take some time to complete the case. Such development would be in line with the attitude which has been taken by the labor executives since the beginning of the case.

Clerks Complete Presentation

The presentation in support of the clerks' demand for continuation of their national agreement was completed on March 2, Mr. Fitzgerald testifying in part as follows:

Our testimony, though voluminous, is but a brief history of the struggle through which the employees have gone in their efforts to emancipate themselves from industrial servitude. The deplorable conditions that existed prior to the time they organized, to which frequent reference has been made during the progress of this hearing, were not confined to any particular railroad but were general throughout the country. Our testimony has given you some idea of the conditions our people worked under. It has shown you that under the old regime they were denied living wages, as statistics will prove; that they were subjected to most unfair and unjust working conditions; that they worked long hours without extra compensation; that they had absolutely no protection against dismissal without cause; that they had no assurance that their skill and industry would be rewarded; that they were utterly at the mercy of their employers. And to add insult to injury, every attempt they made to collectively improve those conditions was ruthlessly thwarted by summarily dismissing from the service every known leader; by the denial of their constitutional rights of free speech and free assembly; by spying upon and discharging employees found entering a union meeting.

It is amazing that these employers should have thought that this sort of treatment was profitable. It is more amazing that they should come before this board and declare, in the face of facts that are incontrovertible, that our national agreement is detrimental to the service and makes the enonomic operation of the railroads impossible. I repeat the assertion that I made earlier in my testimony, that the employees whom I represent are giving better service today than before they had a national agreement. I deny absolutely that the conditions under which these employees formerly worked are conducive to good service. Those conditions are conducive of nothing but poor workmanship and bad citizenship. Those conditions are inimical, not only to the interests of the worker, but to the public.

The management denies that their request for the setting aside of the national agreement is an attempt to restore the old order of things. They declare that they simply want system agreements substituted for national agreements. But these men who are asking for this are the same men who have positively refused to deal collectively with their employees; they are the men who were responsible for the conditions we have been talking about. Have they suddenly had a change of heart? Judging from our past experiences we believe not—we have been beguiled too many times by promises from these men.

We are not living in the same world we lived in five years ago. Old industrial methods will not meet the requirements of new industrial needs. The railroad workers, having finally loosened the bonds of industrial autocracy and having lifted themselves to a position bordering upon, but still far from just, are not going to peaceably surrender the things they have struggled for years to gain.

This is a momentous problem confronting your board. You hold, as it were, in the palm of your hand the welfare of two million men. The industrial peace and tranquillity of the nation may depend upon the decision you render. Labor is looking for no special privileges. It wants only what it is justly entitled to; namely, a fair and square deal, and it is determined to have that. The Congress of the United States passed the Transportation Act declaring that it was necessary to properly safeguard our great public highways. We have heard a great deal about the protection the Transportation Act affords the employees. What protection does it afford if it fails even to guarantee them just and equitable wages and working conditions? No protection whatever will be left them if the national agreements are set aside except their economic strength, which they will surely use to prevent a return to the former intolerable conditions.

It is interesting to note that during the past few weeks, all of the labor organizations' spokesmen have talked of "the request of the managements for the setting aside of the national agreements." It will be recalled that this controversy was brought before the Board by the employees who demanded the perpetuation of their national agreements. The vigor with which the carriers have opposed this demand has evidently caused the representatives of the employees to forsake the aggressive and adopt a defensive policy.

Walsh Asks for Decision on Labor's Request

The railroad labor organizations, through their general counsel, Frank P. Walsh, on February 24, petitioned the Board for an immediate decision on labor's previous request for the calling of a joint conference between railway executives and labor leaders to settle the controversy over national agreements. A decision without delay was desirable, Mr. Walsh said, "since it may be necessary for us to seek a judicial determination as to certain features of the Transportation Act and as to certain interpretations of the Act by the carriers, by ourselves, and by your honorable body."

The petition said in part:

"On February 17, 1921, a formal request was submitted for a recommendation by the Board that all grievances and complaints of the railway executives as to rules and national agreements be remanded to a general conference between the national organization of the carriers and the national representatives of the railway employees.

"We now ask that the Board at the earliest possible moment hand down its ruling or decision on that request. It is essential that we know at as early a moment as possible the decision of the Board in this important matter, as it necessarily will determine largely the scope and character of our preparation in the case which the Board has set for hearing March 10, 1921.

"It may be necessary for us to seek a judicial determination as to certain features of the Transportation Act and as to interpretations of the Act by the carriers, by ourselves and by your honorable body, and for this additional reason we urge respectfully that the Board hand down its decision as soon as possible."

No action has so far been taken on this petition.

Frank P. Walsh, general counsel for the railroad labor organizations affiliated with the American Federation of Labor, later addressed a petition to the Railroad Labor Board at Chicago, asking that the Board hand down, at the earliest possible moment, its ruling or decision on the request for a recommendation by the Board that all grievances and complaints of the railway executives as to rules and national agreements be remanded to a general conference between the national organization of the carriers and the national representatives of the railway employees.

"It is essential," the petition said, "that we know, at as early a moment as possible, the decision of the Board in this important matter, as it necessarily will determine largely the scope and character of our preparation in the case which the Board has set for hearing March 10. It may be necessary for us to seek a judicial determination as to certain features of the Transportation Act and as to interpretations of the Act by the carriers, by ourselves and by your honorable body, and for this additional reason, we urge respectfully that the Board hand down its decision as soon as possible."

Erie Hearings Closed

Hearings in the controversy between the Erie and its train despatchers and track laborers, the opening phases of which were described in the *Railway Age* of February 18 (page 412), were held on February 23. The Erie, on February 14, issued an order reducing the wages of track laborers where the "going" rate was lower than the rates fixed in the Board's award of last spring, re-establishing the seven-day week for train despatchers and deducting the January 31 earnings of telegraphers. Representatives of the employees concerned protested to the Board, which as a result issued an order directing the Erie to rescind its order until hearings could be held before the Board. The Board, at the same time, ordered an investigation to determine whether the Erie had violated Decision No. 2 in ordering these wage reductions.

When the case came before the Board on February 23, F. W. McLaughlin and J. G. Luhrsen, representing, respectively, the organizations of the maintenance of way workers and the train despatchers, contended in their testimony that the question of whether or not the Erie had violated the Board's Decision No. 2 was the only question which was properly before that body, and asked for a ruling first on that phase of the controversy. The question of the justifiableness of the wage cut was not properly before the Board, Mr. McLaughlin contended, because conferences on this dispute had not been held between the carrier and representatives of the men.

Mr. Luhrsen contended, in addition, that the train despatchers are not required, by the terms of the Transportation Act, to confer with the management until the order making effective the abolition of the weekly rest day and the deduction from the pay of the telegraphers is rescinded.

Samuel Adams, representing the Erie, pointed out that the employees had objected to changes made in their working conditions. This dispute, he contended, could not properly be before the Board, inasmuch as rules and working conditions are now under consideration by the Board. In reply to questioning, Mr. Adams stated that the Erie had not complied with the Board's order to rescind its wage cut ruling and held that the Board has no jurisdiction to make "stay" orders without hearings and proper representation by all the parties interested.

R. S. Parsons, general manager, presented the carriers' reasons for ordering a wage reduction, stating that in December, 1920, $1.01 was paid out for materials and wages, exclusive of the expenditures for taxes, which run about $300,000, for every $1.00 of income. In January, he testified, because of the continued slump in business, $1.07 was paid out for every dollar of income. These facts led to the ordering of a reduction in the wages being paid unskilled labor only after every other form of economy had been employed, he added.

"It has been represented here," Mr. Parsons said, "that we are paying track men 30 cents per hour. That is only partially true. The order was to pay the men the 'going rate.' Through the Youngstown (Ohio) district, we are not paying 30 cents, but 38 cents, and it is only in the isolated districts where labor is plentiful that we are paying 30 cents per hour. We are now paying anywhere from 30 to 48 cents per hour."

W. S. Bratton, in closing the case for the employees, said: "I think the Erie has violated Decision No. 2, and if they refuse to put into effect the orders of this Board and pay the wages, it is up to us, and we will endeavor to find a way to collect the money from the Erie Railroad Company."

The case was closed on February 23.

Missouri & North Arkansas Employees Walk Out

Four days after the Board had remanded the dispute between the Missouri & North Arkansas and its employees to conferences between the management and representatives of the men, the officers of that road were notified that unless the wage reduction order was rescinded the men would walk out. The management replied that under the ruling of the Board, reported in part in the *Railway Age* of February 25 (page 454), it could not comply with the request. The threat materialized on February 27, when the enginemen, trainmen, telegraphers and station agents left their work.

The strike was ordered after the railroad company, in compliance with authorization from the federal board, had called upon the employees to appoint representatives to confer with the railroad management on the question of reducing wages. Brotherhood officers have let it be known that the strike has the backing of the national organizations and that strike benefits will be paid the striking employees for the period of the tieup.

The Board has not decided what action it will or can take in this matter. C. W. W. Hanger, a member of the Board, said in regard to these developments:

"The Board has received a telegram from the general manager of the Missouri & North Arkansas stating that the employees had gone on strike. We have not officially considered the action and the telegram was in the nature of advice rather than complaint."

A. B. & A. Enters Receivership

As a sequel to the Atlanta, Birmingham & Atlantic case, the progress of which was described in the *Railway Age* of February 4 (page 319), of February 11 (page 367), of February 18 (page 412), and of February 25 (page 454), B. L. Bugg, president of the road, was named receiver by Judge S. H. Sibley in the United States District Court at Atlanta, Ga., on February 25. During the progress of the hearings before the Labor Board, it was asserted by the representatives of the road that the wage reduction placed in effect on February 1, would enable the line to keep out of the hands of the receiver. The dispute was remanded

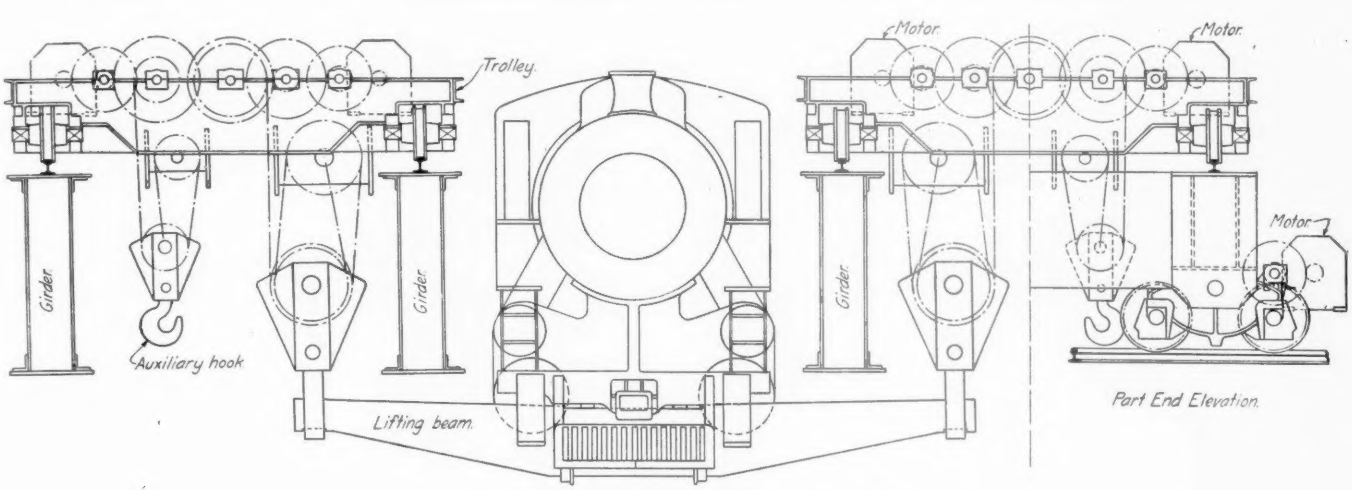
by the Board to conference between the carrier and its employees. Counsel for the company, in answering the petition for the receivership, stated that with the state and federal railroad commissions fixing rates and the Labor Board fixing wages, it was unable to meet expenses, and in the interests of all parties concerned, a receivership was desirable.

Later Judge Sibley signed an order putting into effect the schedule of reductions which Mr. Bugg, as president of the road, had urged before the Labor Board. These reductions amount to approximately 50 per cent of all increases granted since the government assumed control of the property in 1917. At the same time Judge Sibley indicated his willingness to grant a hearing should the men desire to make a showing in court as to wage scales.

A New Type of Erecting Aisle Saves Shop Headroom

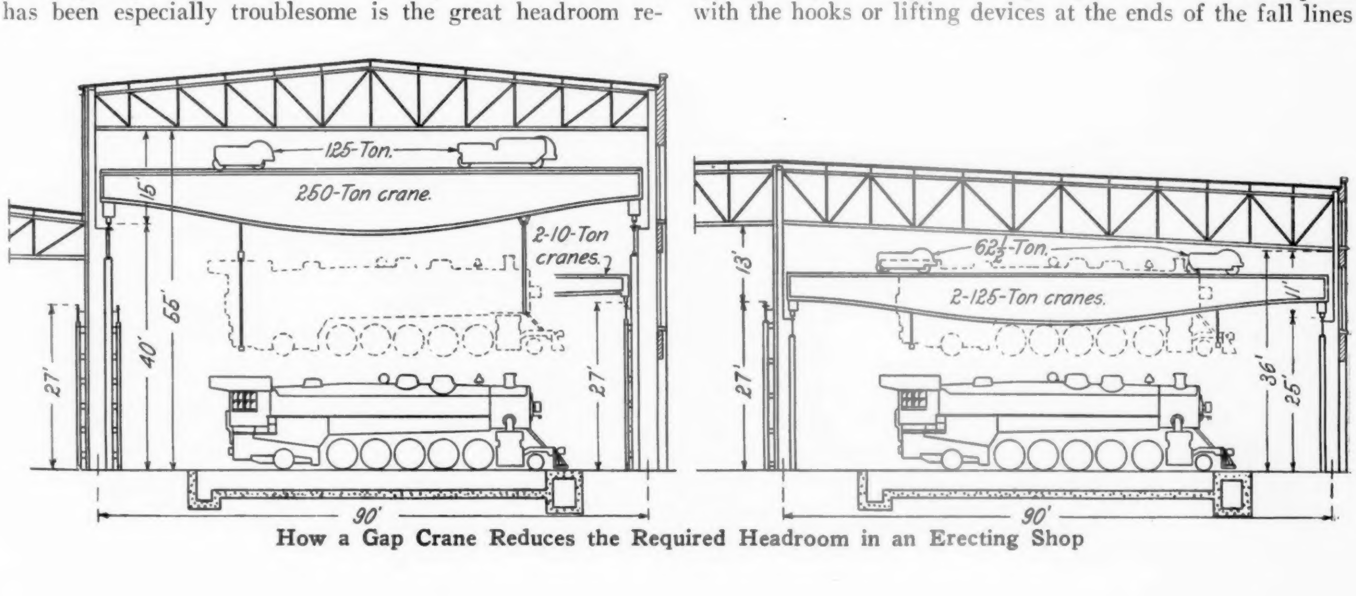
One of the most formidable problems imposed in the design of modern locomotive repair shops is to provide a traveling crane capable of lifting a complete locomotive high enough so that it may be carried over the tops of other engines in the shop to be set down at some other point. With the rapid increase in the length and weight of locomotives, so that 90-ft. cranes are now common, this utility has added greatly to the cost of erecting shops. One feature that has been especially troublesome is the great headroom required. Thus, with adequate allowance made for clearance, the height of a locomotive on the floor, plus that of another one being passed over the top of it, plus the depth of the traveling crane and its trolley, gives a total height of 54 to 56 ft. or more from the floor to the underside of the roof trusses. This height is obviously a source of great expense in construction and is also a disadvantage in the operation of the shop because of the waste of heat, inefficient illumination and disadvantageous height to which the crane operator is removed from the floor.

An appreciation of these shortcomings of the prevailing arrangement of shop structures has led to the development of the "gap crane" erecting shop by which from 15 to 18 ft. of the vertical height of the shop building may be saved. This is the invention of Harvey Shoemaker, formerly motive power superintendent of the Bangor & Aroostook. The idea is simple. The girders of the crane are spread apart a sufficient distance to permit the locomotive to be lifted up between them. As a consequence the crane may occupy the same vertical position as the locomotive, consequently the vertical height between the floor and the underside of the roof trusses consists of the height of the locomotive on the floor, plus the height of the locomotive in the air, plus the necessary clearance. The idea will be understood more clearly after an examination of the illustrations.



Cross Sectional Elevation of a Gap Crane

The gap crane is made up of four girders arranged in pairs with the two pairs separated a sufficient distance to allow the entire locomotive to be lifted up between them. Four trolleys of 62½ tons capacity each are used in pairs with the hooks or lifting devices at the ends of the fall lines

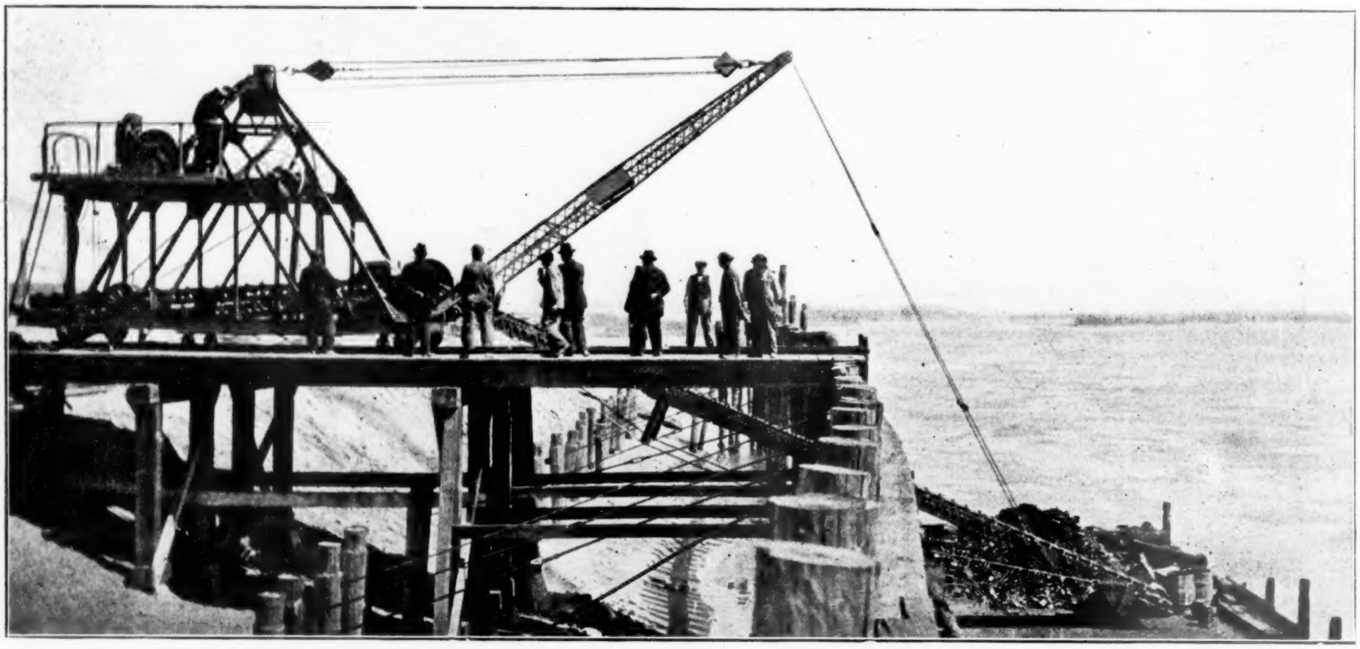


How a Gap Crane Reduces the Required Headroom in an Erecting Shop

attached to lifting beams which engage the front and rear ends of the locomotive. The lifting beam at the front end may be placed either under the extended sills or side frames which support the pilot truck or may be provided with adjustable saddle blocks and placed under the front end of the boiler, thus giving the same advantages as the sling rig but with greater resistance against overturning.

The gap crane may be constructed as a single unit or the two pairs of girders may be arranged to serve as independent "twin" cranes with provision for multiple unit control when they are used together for lifting a locomotive. Another feature of this development is the facility it offers for adaptation to old shops equipped with a crane of limited capacity. Thus, if a shop is equipped with a traveling crane of 120 or 125 tons capacity, a second crane of the same capacity may be provided and the two arranged to serve as twin cranes.

One point not to be overlooked in considering this development is the need in any modern shop of auxiliary or messenger cranes of 10 to 20 tons capacity. In the modern shop where high headroom has had to be provided for the lift-over operations, the auxiliary cranes have been usually operated on a separate runway about 27 ft. above the floor and therefore from 12 to 16 ft. below the runway upon which the large capacity crane is supported and thus the small cranes are enabled to operate without any appreciable interference with the large cranes. With the use of the gap crane in shops of 10 to 12 pits in erecting aisles, it is believed that the use of a single crane runway for both the heavy and light capacity cranes will work out very satisfactorily.

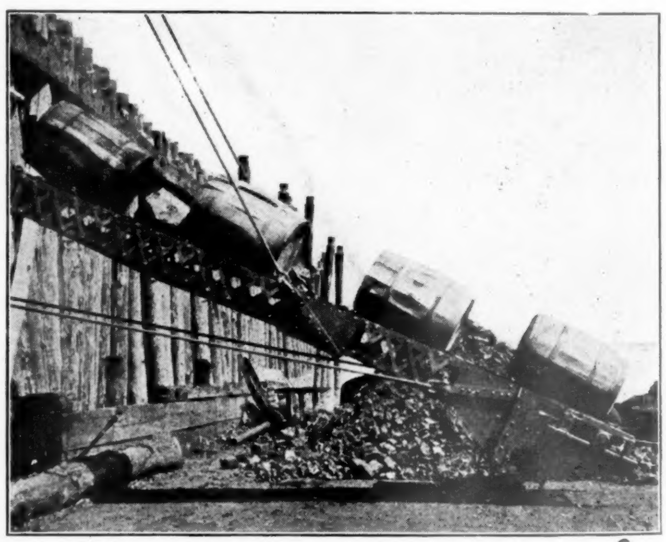


Raising and Lowering of the Boom Compensates for Variation in the Distance from the Water to the Dock Level

Mechanical Equipment for a Railway Water Terminal

A new type of material handling equipment has been developed for use at rail-water terminals where large variations in the stage of water occur. Thus, the illustrations show the use of this conveying system by the Illinois Terminal Railroad at Alton, Ill., for the transfer of freight to and from barges on the Mississippi river.

The equipment consists of a frame, mounted on wheels, that runs on a track laid on the dock perpendicular to the water front. Extending from the "water" end of this frame is a large carrier, supported at its outer end by rods attached to a boom. This carrier contains the main conveyor by means of which the freight is transferred to and from the barge, the carrier being raised or lowered by means of blocks and tackle and a hoist as shown in the illustration to provide for the changing water level. The main conveyor is supplemented by a second conveyor extending the length of the main frame (on the wheels) and, when necessary to deliver the load at some distance behind the machine, by a third conveyor projecting to the rear. These auxiliary conveyors may be raised or lowered as found desirable for delivering packages to the floor of the dock, to freight cars or to motor trucks. The fact that the entire frame rests on wheels lends considerable flexibility to the equipment in reaching the points of receipt and delivery to the greatest advantage. They will handle package freight up to an individual package weight of 400 lb.



The Lower End of the Main Conveyor Hoisting Package Freight from the Deck of a Barge

This form of conveyor, some types of which will handle packages weighing up to 800 lb., is handled by the Brown Portable Conveying Machinery Company, Chicago.

General News Department

The American Railway Tool Foremen's Association will hold its eleventh annual convention at the Hotel Sherman, Chicago, on August 9, 10 and 11.

The legislature of Indiana has before it a bill to repeal the full train crew law of that state and also one to repeal the full switching law; and the bill has actually been passed by the lower House by considerable majorities.

Senator Cummins, chairman of the Senate committee on interstate commerce, announces that he proposes to introduce at the beginning of the next session of Congress a bill providing for the compulsory consolidation of the railroads into 14 to 18 systems.

Proposals to reduce the pay of unskilled workmen on April 1, noticed in another paragraph, referring to the New York Central, are also being issued by the Central of New Jersey, the Lehigh Valley and other roads; and similar notices will probably be issued within a few days by all of the prominent Eastern roads.

Senator Calder's bill for the regulation of the coal industry was reported to the Senate on February 24 by the committee on manufactures. The committee has been holding hearings on the bill, and has eliminated the provisions for price-fixing and government control and operation during emergencies. The bill provides for greater publicity regarding mine operation and costs of production.

The American Society for Steel Treating will hold its 1921 convention and exhibition at Indianapolis, Ind., on September 19 to 24 inclusive. The exhibition will be in the Manufacturers' Building at the State Fair Grounds which will provide a floor space of 76,800 sq. ft., and the meetings will be held at the Women's Building, which is located a short distance from the exhibition hall, where three or four large rooms will make it possible to hold sectional meetings simultaneously.

The Chicago Safety Council, through its Steam Transportation Committee, has requested all of the railroads to furnish information with respect to accidents to school children while trespassing on railroad premises. It is intended that this information shall be compiled periodically and forwarded to the superintendent of schools who in turn will place the data before all the scholars in bulletin form. In line with its work the committee is urging that safety instruction be made a part of the school curriculum.

William G. McAdoo, formerly director general of railroads, declaring the transportation act a failure both in theory and effect, told newspaper men at Washington the other day that the railroads were drifting toward government ownership, which, he added, seemed to be the only apparent solution. The increasing of rates has not solved the railroad problem, Mr. McAdoo said, and the railroads have not been put into the condition desired, "despite the payment of millions of dollars of taxpayers' money to them under the terms of the transportation act." He did not discuss the question of how many of the millions had been paid.

The New York Central has notified its "unskilled" workmen—freighthouse men, platform, storehouse men, freight handlers, trackmen, track walkers, car laborers, ashpitmen, etc., to send representatives to a conference with officers of the company to be held in New York City on March 8, when revisions of wages will be proposed, to go into effect on April 1. It is understood that about 30,000 employees of the New York Central are affected by this notice. Many of them have no organization, and, apparently, committees will have to be chosen this week. Any properly accredited representative of 100 or more men of any craft, whether connected or not connected with a brotherhood, will have a standing in the conference. The other roads in the New York Central system have as yet taken no action in this direction. The large majority of unskilled laborers are now receiving about 48.5 cents an hour, which is higher than the prevailing rate in most cities on the lines of the New York Central.

Persons killed in automobile accidents in the United States in 1919, according to statistics gathered by the Census Bureau, numbered about 8,000, and an officer of the Southern Railway calculates that the actual total is considerably larger than the total number of persons killed on the railroads of the country. He says:

"Automobile accidents in the United States claimed 1,474 more victims in 1919 than were killed in accidents on American railways. Deaths from automobile accidents showed a total of 7,969 for the Census Bureau's registration area, comprising about 80 per cent of the country's total population. In 66 of the large cities there were 3,808. In railway accidents the Interstate Commerce Commission reports 6,495 killed (less than for any previous year since 1898). This included 2,553 trespassers and 1,882 other persons, not either passengers or employees, of whom a large percentage were the victims of collisions between automobiles and railway trains." [Adding non-train accidents on railroads the total is 6,978.]

New Rules for Reporting Operating Statistics

The Interstate Commerce Commission has prescribed revised rules relative to operating statistics intended to continue, with some modifications, the compilation and report by Class I carriers, except switching and terminal companies, of the basal operating statistics reportable to the commission in special monthly and annual forms pertaining to the year 1920. The principal changes are, briefly: (1) The requirement of gross ton-miles of locomotives and tenders in connection with certain items; (2) the addition of a statement of the average number of serviceable and of unserviceable locomotives by classes of service; (3) the omission of rating ton-miles and of locomotive-hours; (4) the requirement of direction of movement for freight-train car-miles only; (5) the requirement of monthly and cumulative figures for like items in the same forms without a separate statement of annual figures other than those appearing in the regular annual reports of the carriers.

Precepts for Minneapolis & St. Louis Employees—And the Rest of Us

[From an Official Circular]

Courtesy, consideration and common sense, practiced continuously, will create a "real" personality on "M. & St. L."

Never overlook any opportunity to boost "M. & St. L."

No matter what may be your position on "M. & St. L.," remember this one thing: The patron comes first.

Surround your job; bound it on all sides with Perseverance, Conscientiousness, Faithfulness and Efficiency.

If you feel the job on "M. & St. L." is not big enough for you, make it bigger.

Don't be afraid to ask intelligent questions.

Be willing to assist your fellow-workers.

Whenever a question is asked, take pains to answer it accurately, fully, briefly, promptly and with a pleasant smile.

Do not get angry under any circumstances.

If you are in the wrong, you can't afford to get angry.

If you are in the right, you don't need to get angry.

Servants of the Public Must Be Respectful

Respect in the railroad business is closely connected with obedience, for disobedience to a superior is disrespect. In the operation of a railroad, there are necessarily officers of various

ranks. Fitness for a position is the first consideration in choosing an officer. When an employee is chosen for an official position he is entitled to the respect that the position demands. When respect is wanting, little, if any, attention is paid to instructions issued. In order to command the respect of subordinates it is essential that officers be competent to fill the positions they occupy. It is not possible for an officer to secure from his employees the respect to which he is entitled, unless he is willing to respect his superior.

Officers are entitled to respect. It is just as easy to say "Yes, sir," as it is to say "Yah." Certainly it is much more respectful. To respect a person or a position, one must have confidence in the person or position. It behooves every officer to conduct himself so that he will command, and be in a position to demand, the respect of his subordinates.—*E. E. Nash, general manager, Minneapolis & St. Louis.*

On-Time Record of the Illinois Central

The Illinois Central has just issued the seventh article in its series of public statements, featuring the road's record for passenger train punctuality together with additional information on its service and equipment. The circular presents the percentage of trains arriving on time for four months ending with November, 1919, as compared with the percentage figures compiled by the United States Railroad Administration as follows:

	All Railways.	Illinois Central System.
August, 1919	83 per cent	95.4 per cent
September, 1919	84 per cent	96.2 per cent
October, 1919	84 per cent	95.4 per cent
November, 1919	82 per cent	96.2 per cent

Reviewing the conditions for 1920 the article says that for the entire system 79,022 passenger trains were operated during that year on its 6,000 miles of line. The low level of on-time arrivals in 1920 was in January and April, when a figure of 93.4 per cent was reached whereas the high level came in October when a percentage of 97.3 per cent was made. The percentage average for all months of 1920 was 95.55.

Store Door Delivery

Pursuant to a vote of the Federal Highway Council, the desirability of establishing store door delivery of freight in large cities is to be presented to the principal railroads by a committee, of which J. C. Lincoln, traffic manager of the Merchants' Association, New York City, and formerly chief freight traffic officer of the Wabash Railroad, is a member. It is proposed to recommend that the railroads themselves provide the necessary plants and conduct store door delivery and collection, including in the operations all merchandise to or from freight houses, even carload freight; but not including freight loaded or unloaded at team tracks. In New York City large quantities of freight shipped in carloads is handled over the platforms. The committee will recommend that a reasonable charge be made for the service, separate from the regular freight charge, and that rates be published in separate tariffs. Other members of the committee are A. E. Beck, Baltimore Md.; W. J. Pitt, Philadelphia, Pa.; T. T. Harkrader, New York; W. J. L. Banham, New York, and Dr. R. S. MacElwee, director, Bureau of Foreign and Domestic Commerce, Washington, D. C.

Retrenchment

Further extensive reductions of forces by the Pennsylvania Railroad were reported on February 26, at Altoona, Pittsburgh and other points. The operation of the Pittsburgh Terminal as a separate division is to be discontinued and the old division boundaries will, in general, be restored.

The Delaware, Lackawanna & Western has ordered further reductions in forces at the Scranton shops. The Union Pacific on February 26 ordered further extensive reductions in its shops. On the New York Central, large numbers of men returned to work in the shops at Collinwood, Ohio; Elkhart, Ind., and other points, after forced vacations of one or more weeks.

The Canadian National, following the severe falling off in business throughout large sections of Canada, has taken off some passenger trains in New Brunswick, including trains No. 31 and No. 32 between Moncton and Levis. In the western part of Ontario considerable numbers of men have been dismissed and two divisions have been consolidated into one.

Two hundred men in the shops of the New York, Ontario & Western at Middletown, N. Y., resumed work on March 1 after a layoff of a month.

Economy; Trust Men to Practice It

If we are fair with ourselves, we shall admit that we have never done as much as we could do to economize. We have been living in the thought of "getting by." Waste starts in with the little things and gradually grows and grows until it reaches the larger ones. How many officers when sending a telegram, censor it, to be sure that the fewest possible words have been used? It is not uncommon for employees to receive an order to have a certain thing done and then in the same order, instructions how it should be done. Surely, that is not economy. Every man must be credited with possessing the ability to think and use ordinary judgment, and he should not be deprived of his right to exercise it. If the employee is not permitted to think for himself, to think out his problems, to think how the thing should be done most economically, how can we expect him to be broad and independent? A subordinate official should grow and expand so that when his turn comes he may be ready for promotion. Economy means the wise spending of money or time, good stewardship, careful administration. We are just as large as we will permit ourselves to be. Economy comes by using what we have to the best possible advantage. An inventory of "M. & St. L." will show that we have practically as many resources on this railroad as other railroads have. In many instances we have much better.—*E. E. Nash, general manager, Minneapolis & St. Louis.*

Revenues and Expenses for 1920

The net operating income of the railroads of the United States for the calendar year 1920 was only $62,264,421, or about one-third of 1 per cent on the valuation used by the Interstate Commerce Commission last summer for the purpose of the rate case, according to the final summary of revenues and expenses for December, and the year 1920, issued by the commission. Total operating revenues for the year were $6,225,402,762, or $1,041,000,000 greater than for the year 1919 when the roads earned a net of $516,290,090. Operating expenses, $5,826,197,474, were $1,406,000,000 greater than in 1919 and taxes, which amounted to $281,380,620, were $83,000,000 greater. The Eastern roads had a deficit for the year of $99,384,902, while the other districts showed decreases as compared with 1919. For the month of December the net operating income (for the whole country) was only $10,225,583, although the total operating revenues were $97,000,000 greater than for December, 1919. The summary, which covers 188 Class I roads and 15 switching and terminal companies, is given in the table.

Railway Receipts and Expenses, December and Twelve Months Ending with Decemper

Item	Calendar Year 1920	Calendar Year 1919	December 1920	December 1919
27. Average number of miles operated....	235,580.01	234,428.79	235,881.09	234,571.20
Revenues:	Dollars	Dollars	Dollars	Dollars
28. Freight	4,325,078,866	3,556,918,712	386,057,436	303,704,454
29. Passenger	1,288,808,159	1,180,010,266	115,060,511	100,080,515
30. Mail	150,404,467	57,456,159	8,876,400	9,716,268
31. Express	143,501,613	127,708,607	9,664,053	16,048,057
32. All other transportation	163,494,648	126,333,455	18,680,428	11,070,184
33. Incidental	148,731,748	130,500,436	11,850,844	11,928,652
34. Joint facility—Cr...	7,790,789	7,301,480	696,183	1,035,020
35. Joint faculty—Dr...	2,407,528	2,164,894	303,474	196,334
36. Railwav operating revenues	6,225,402,762	5,184,064,221	550,582,381	453,386,816
Expenses:				
37. Maintenance of way and structures....	1,033,548,881	778,340,219	71,735,168	63,995,994
38. Maintenance of equipment	1,584,405,718	1,232,960,112	138,741,728	117,131,940
39. Traffic	73,659,951	47,534,691	7,527,801	4,633,116
40. Transportation	2,907,187,529	2,192,770,837	264,578,061	213,762,268
41. Miscellaneous operations	61,523,891	48,442,246	5,036,498	4,414,510
42. General	170,892,533	125,422,140	15,969,552	11,180,192
43. Transportation for investment—Cr. ...	5,021,029	6,028,296	381,919	603,991
44. Railway operating expenses	5,826,197,474	4,419,441,949	503,206,889	414,514,029

45. Net revenue from railway operations...	399,205,288	764,622,272	47,375,492	38,872,787
46. Railway tax accruals	281,380,620	198,806,615	30,295,417	21,259,570
47. Uncollectible railway revenues	1,226,574	917,221	300,675	107,357
48. Railway operating income	116,598,094	564,898,436	16,779,400	17,505,860
49. Equipment rents (Dr. bal.)	34,712,122	32,717,162	4,182,784	1,930,256
50. Joint facility rent (Dr. bal.).......	19,621,551	15,891,184	2,371,033	1,870,627
51. Net of items 48, 49 and 50	62,264,421	516,290,090	10,225,583	13,704,977
52. Per cent of expenses	93.59	85.25	91.40	91.43

Note: (a) Federal lap-over items settled during the month are included in the above compilations for those roads that have indicated that estimates were not included for substantially all unaudited corporate items. (b) The amount of war taxes included in December, 1920, is $5,395.794, and for period, March to December, 1920, $33,349,938.
c Credit item.
d Debit item.

Meetings and Conventions

The following list gives names of secretaries, dates of next or regular meetings and places of meetings:

Air Brake Association.—F. M. Nellis, Room 3014, 163 Broadway, New York City. Next convention, May 3-6, 1921, Hotel Sherman, Chicago. Exhibit by Air Brake Appliance Association.

Air Brake Appliance Association.—Fred W. Venton, 836 So. Michigan Ave., Chicago. Meeting with Air Brake Association.

American Association of Demurrage Officers.—F. A. Pontious, Supervisor of Demurrage and Storage, C. & N. W. Ry., Chicago.

American Association of Dining Car Superintendents.—S. W. Derr, Philadelphia & Reading, Philadelphia, Pa.

American Association of Engineers.—C. E. Drayer, 29 S. La Salle St., E. I. R. R., 332 South Michigan Ave., Chicago. Next meeting, June, 1921, Quebec, Can.

American Association of Passenger Traffic Officers.—W. C. Hope, C. R. R. of N. J., 143 Liberty St., New York.

American Association of Railroad Superintendents.—J. Rothschild, Room 400, Union Station, St. Louis, Mo. Next convention, August 24-26, 1921, Kansas City, Mo.

American Electric Railway Association.—E. B. Burritt, 8 W. 40th St., New York.

American Railroad Master Tinners', Coppersmiths' and Pipe Fitters' Association.—C. Borcherdt, 202 North Hamlin Ave., Chicago, Ill. Next convention September 12-14, Hotel Sherman, Chicago.

American Railway Association.—J. E. Fairbanks, General Secretary, 75 Church St., New York, N. Y. Next regular meeting, November 16, 1921.

Division I—Operating, W. J. Fripp (Chairman), General Manager, New York Central Railroad, Eastern Lines, New York, N. Y.; R. E. McCarty (Vice-Chairman), General Manager, Central Region, Pennsylvania System, Pittsburgh, Pa.

Freight Station Section (including former activities of American Association of Freight Agents), C. E. Fish (Chairman), Freight Agent, Baltimore & Ohio Railroad, Cincinnati, Ohio; J. C. Gilmore (First Vice-Chairman), Agent, Pennsylvania System, Eastern Region, Philadelphia, Pa.; C. M. Teschemacher (Second Vice-Chairman), General Agent, Chicago & Alton Railroad, Chicago, Ill.; R. O. Wells (Secretary), Freight Agent, Ilinois Central Railroad, Chicago, Ill.

Medical and Surgical Section, D. Z. Dunott (Chairman), Chief Surgeon, Western Maryland Railway, Baltimore, Md.; G. G. Dowdall (First Vice-Chairman), Chief Surgeon, Illinois Central Railroad, Chicago, Ill.; Duncan Eve (Second Vice-Chairman), Chief Surgeon, Nashville, Chattanooga & St. Louis Railway, Nashville, Tenn.

Protective Section (including former activities of the American Railway Chief Special Agents and Chiefs of Police Association), R. S. Mitchell (Chairman), Chief Special Agent, Missouri Pacific Railroad, St. Louis, Mo.; H. L. Denton (First Vice-Chairman), General Superintendent of Police, Baltimore & Ohio Railroad, Baltimore, Md.; Emmett Gregg (Second Vice-Chairman), Superintendent Special Service, Atchison, Topeka & Santa Fe Railway, Topeka, Kan.; J. C. Caviston (Secretary), 75 Church St., New York, N. Y.

Telegraph and Telephone Section (including former activities of the Association of Railway Telegraph Superintendents), H. Hulatt (Chairman), Manager of Telegraphs, Grand Trunk Railway, Montreal, Que.; W. H. Hall (First Vice-Chairman), General Superintendent of Telegraph, Missouri, Kansas & Texas Lines, Denison, Texas; R. F. Finley (Second Vice-Chairman), Superintendent Telegraph, New York Central Lines, West of Buffalo, Cleveland, Ohio; W. A. Fairbanks (Secretary), 75 Church St., New York, N. Y.

Division II—Transportation (including former activities of the Association of Transportation and Car Accounting Officers), E. J. Pearson (Chairman), President, New York, New Haven & Hartford Railroad, New Haven, Conn.; J. J. Bernet (Vice-Chairman), President, New York, Chicago & St. Louis Railroad, Cleveland, Ohio; C. W. Crawford (Chairman, General Committee), 431 South Dearborn St., Chicago, Ill.; G. W. Covert (Secretary), 431 South Dearborn St., Chicago, Ill.

Division III—Traffic, G. H. Ingalls (Chairman) Vice-President, New York Central Lines, New York, N. Y.; J. Gottschalk (Secretary), 143 Liberty St., New York, N. Y.

Division IV—Engineering, H. R. Safford (Chairman), Assistant to the President, Chicago, Burlington & Quincy Railroad, Chicago, Ill.; C. J. Kelloway (Vice-Chairman), Superintendent of Signals, Atlantic Coast Line Railroad, Wilmington, N. C.; E. H. Fritch (Secretary), 431 South Dearborn St., Chicago, Ill. Next annual meeting, March 15-17, 1921, Chicago, Ill.

Construction and Maintenance Section, H. R. Safford (Chairman), Assistant to the President, Chicago, Burlington & Quincy Railroad, Chicago, Ill.; E. H. Fritch (Secretary), 431 South Dearborn St., Chicago, Ill.

Electrical Section, George Gibbs (Chairman), Chief Engineer of Electric Traction, Long Island Railroad, New York, N. Y.; E. B. Katte (Vice-Chairman), Chief Engineer Electric Traction, New York Central Railroad, New York, N. Y.; E. H. Fritch (Secretary), 431 South Dearborn St., Chicago, Ill.

Signal Section (including former activities of the Railway Signal Association), F. W. Pfleging (Chairman), Signal Engineer, Union Pacific Railroad, Omaha, Nebr.; F. B. Wiegand (First Vice-Chairman), Signal Engineer, New York Central Railroad, Western Lines, Cleveland, Ohio; C. A. Christofferson (Second Vice-Chairman), Signal Engineer, Northern Pacific Railway, St. Paul, Minn.; H. S. Balliet (Secretary), 75 Church St., New York, N. Y.

Division V—Mechanical (including former activities of the Master Car Builders' Association and the American Railway Master Mechanics' Association), W. J. Tollerton (Chairman), General Mechanical Superintendent, Chicago, Rock Island & Pacific Railway, Chicago, Ill.; J. Coleman (Vice-Chairman), Assistant to General Superintendent Motive Power and Car Departments, Grand Trunk Railway, Montreal, Que.; V. R. Hawthorne (secretary), 431 South Dearborn St., Chicago, Ill. Next convention June 15-22, 1921, Atlantic City, N. J. Exhibit by Railway Supply Manufacturers' Association.

Equipment Painting Section (including former activities of the Master Car and Locomotive Painters' Association), E. L. Younger (Chairman), Foreman Painter, Missouri Pacific Railroad, Little Rock, Ark.; J. G. Keil (First Vice-Chairman), Foreman Painter, New York Central Railroad, Western Lines, Elkhart, Ind.; J. R. Ayers (Second Vice-Chairman), General Manager Painter, Canadian Pacific Railway, Montreal, Que.; V. R. Hawthorne, (Secretary), 431 South Dearborn St., Chicago, Ill.; A. P. Dane (Assistant Secretary), Foreman Painter, Boston & Maine Railroad, Reading, Mass.

Division VI—Purchases and Stores (including former activities of the Railway Storekeepers' Association), H. C. Pearce (Chairman), General Purchasing Agent, Seaboard Air Line Railway, Norfolk, Va.; H. E. Ray (Vice-Chairman), General Storekeeper, Atchison, Topeka & Santa Fe Railway, Topeka, Kans.; J. P. Murphy (Secretary), General Storekeeper, New York Central Railroad, Western Lines, Collinwood, Ohio; W. J. Farrell (Assistant Secretary), 75 Church St., New York, N. Y. Second annual meeting June 20-22, 1921, Atlantic City, N. J.

Division VII—Freight Claims (including former activities of the Freight Claim Association), H. C. Pribble (Chairman), General Claim Agent, Atchison, Topeka & Santa Fe Railway System, Topeka, Kans.; H. C. Howe (First Vice-Chairman), Freight Claim Agent, Chicago & North Western Railway, Chicago, Ill.; D. C. MacDonald (Second Vice-Chairman), Assistant General Claim Agent, Canadian Pacific Railway, Winnipeg, Man.; Lewis Pilcher (Secretary), 431 South Dearborn St., Chicago, Ill. Next meeting Coronado Beach, San Diego, Calif., May 17, 1921.

American Railway Bridge and Building Association.—C. A. Lichty, C. & N. W. Ry., 319 N. Waller Ave., Austin Station, Chicago. Next convention, October 18-20, 1921, New York City. Exhibit by Bridge and Building Supply Men's Association.

American Railway Engineering Association.—(Works in co-operation with the American Railway Association, Division IV.) E. H. Fritch, 431 South Dearborn St., Chicago. Next annual meeting, March 15-17, 1921, Congress Hotel, Chicago. Exhibit by National Railway Appliances Association.

American Railway Master Mechanics' Association.—(See American Railway Association, Division 5.)

American Railway Tool Foremen's Association.—R. D. Fletcher, 1145 East Marquette Road, Chicago. Exhibit by Supply Association of the American Railway Tool Foremen's Association.

American Short Line Railroad Association.—T. F. Whittelsey, Union Trust Bldg., Washington, D. C.

American Society for Testing Materials.—C. L. Warwick, University of Pennsylvania, Philadelphia, Pa.

American Society of Civil Engineers.—Col. H. S. Crocker (acting secretary), Engineering Societies Building, 33 W. 39th St., New York. Next convention, April 27, 1921, Houston, Texas. Regular meetings, 1st and 3d Wednesday in month, except July and August, 33 W. 39th St., New York.

American Society of Mechanical Engineers.—Calvin W. Rice, 29 W. 39th St., New York. Next meeting, May 23-26, Congress Hotel, Chicago.

American Steel Treaters' Society.—W. H. Eiseman, 154 East Erie St., Chicago.

American Train Dispatchers' Association.—C. L. Darling, Northern Pacific Ry., Spokane, Wash. Next convention, June 20, 1921, Kansas City, Mo.

American Wood Preservers' Association.—George M. Hunt, Chemist, Forest Products Laboratory, Madison, Wis.

Association of Railway Claim Agents.—Willis H. Failing, C. R. R. of N. J., Jersey City, N. J. Next meeting at St. Louis, Mo.

Association of Railway Electrical Engineers.—Jos. A. Andreucetti, C. & N. W., Room 411, C. & N. W. Sta., Chicago. Exhibit by Railway Electrical Supply Manufacturers' Association.

Association of Railway Executives.—Thomas De Witt Cuyler (chairman), 61 Broadway, New York, N. Y.

Association of Railway Supply Men.—C. L. Mellor, 212 W. Illinois St., Chicago. Meeting with International Railway General Foremen's Association.

Association of Railway Telegraph Superintendents.—(See American Railway Association, Division 1.)

Association of Transportation and Car Accounting Officers.—(See American Railway Association, Division 2.)

Bridge and Building Supply Men's Association.—A. J. Filkins, Paul Dickinson Company, Chicago. Meeting with convention of American Railway Bridge and Building Association.

Canadian Railway Club.—W. A. Booth, 131 Charron St., Montreal, Que. Next meeting, December 14.

Car Foremen's Association of Chicago.—Aaron Kline, 626 North Pine Ave., Chicago. Regular meetings, 2d Monday in month, except June, July and August, New Morrison Hotel, Chicago.

Car Foremen's Association of St. Louis, Mo.—Thomas B. Koeneke, Federal Reserve Bank Bldg., St. Louis, Mo. Meetings, first Tuesday in month at the American Hotel Annex, St. Louis.

CENTRAL RAILWAY CLUB.—Harry D. Vought, 95 Liberty St., New York. Regular meetings, 2d Thursday in November and 2d Friday in January, March, May and September, Hotel Statler, Buffalo, N. Y.

CHIEF INTERCHANGE CAR INSPECTORS' AND CAR FOREMEN'S ASSOCIATION.—W. P. Elliott, Terminal Railroad Association of St. Louis, East St. Louis, Ill. Next meeting March 3-4, 1921, Hotel Sherman, Chicago.

CHIEF INTERCHANGE CAR INSPECTORS' AND CAR FOREMEN'S SUPPLY MEN'S ASSOCIATION.—D. B. Wright, 34th St. and Artesian Ave., Chicago, Ill. Meeting with Chief Interchange Car Inspectors' and Car Foremen's Association.

CINCINNATI RAILWAY CLUB.—H. Boutet, 101 Carew Bldg., Cincinnati, Ohio.

EASTERN RAILROAD ASSOCIATION.—E. N. Bessling, 614 F St., N. W., Washington, D. C.

FREIGHT CLAIM ASSOCIATION.—(See American Railway Association, Division 7.)

GENERAL SUPERINTENDENTS' ASSOCIATION OF CHICAGO.—A. M. Hunter, 321 Grand Central Sta., Chicago. Regular meetings, Wednesday preceding 3d Friday in month, Room 856, Insurance Exchange Bldg., Chicago.

INTERNATIONAL RAILROAD MASTER BLACKSMITHS' ASSOCIATION.—W. J. Mayer, Michigan Central R. R., Detroit, Mich. Next convention, August 16-18, 1921, Hotel Sherman, Chicago.

INTERNATIONAL RAILWAY FUEL ASSOCIATION.—J. G. Crawford, 702 E. 51st St., Chicago. Next annual meeting, May 24-26, 1921, Hotel Sherman, Chicago.

INTERNATIONAL RAILWAY GENERAL FOREMEN'S ASSOCIATION.—Wm. Hall, 1061 W. Wabasha Ave., Winona, Minn. Next convention, September 12-15, Hotel Sherman, Chicago. Exhibit by Association of Railway Supply Men.

MAINTENANCE OF WAY MASTER PAINTERS' ASSOCIATION.—E. E. Martin, Union Pacific R. R., Room No. 19, Union Pacific Bldg., Kansas City, Mo. Next convention, October 4-6, 1921, Buffalo, N. Y.

MASTER BOILER MAKERS' ASSOCIATION.—Harry D. Vought, 95 Liberty St., New York. Next convention, May 23-26, 1921, Planters' Hotel, St. Louis, Mo.

MASTER CAR AND LOCOMOTIVE PAINTERS' ASSOCIATION OF THE UNITED STATES AND CANADA.—(See American Railway Association, Division 5, Equipment Painting Section.)

MASTER CAR BUILDERS' ASSOCIATION.—(See American Railway Association, Division 5.)

NATIONAL ASSOCIATION OF RAILROAD TIE PRODUCERS.—E. E. Pershall, T. J. Moss Tie Company, 720 Security Bldg., St. Louis, Mo.

NATIONAL ASSOCIATION OF RAILWAY AND UTILITIES COMMISSIONERS.—James B. Walker, 49 Lafayette St., New York.

NATIONAL FOREIGN TRADE COUNCIL.—O. K. Davis, 1 Hanover Square, New York.

NATIONAL RAILWAY APPLIANCES ASSOCIATION.—C. W. Kelly, Kelly-Derby Co., Peoples Gas Bldg., Chicago. Meeting with American Railway Engineering Association.

NEW ENGLAND RAILROAD CLUB.—W. E. Cade, Jr., 683 Atlantic Ave., Boston, Mass. Regular meetings, 2d Tuesday in month, excepting months of June, July, August and September.

NEW YORK RAILROAD CLUB.—Harry D. Vought, 95 Liberty St., New York. Regular meeting, 3d Friday in month, except June, July and August, 29 W. 39th St., New York.

PACIFIC RAILWAY CLUB.—W. S. Wollner, 64 Pine St., San Francisco, Cal. Regular meeting, 2d Thursday in month, alternately in San Francisco and Oakland.

RAILWAY ACCOUNTING OFFICERS' ASSOCIATION.—E. R. Woodson, 1116 Woodward Building, Washington, D. C. Next annual meeting, June 8, 1921, Hotel Traymore, Atlantic City, N. J.

RAILWAY BUSINESS ASSOCIATION.—Frank W. Noxon, 600 Liberty Bldg., Broad and Chestnut Sts., Philadelphia, Pa.

RAILWAY CLUB OF PITTSBURGH.—J. D. Conway, 515 Grandview Ave., Pittsburgh, Pa. Regular meetings, 4th Thursday in month, except June, July and August, Americus Club House, Pittsburgh, Pa.

RAILWAY DEVELOPMENT ASSOCIATION.—D. C. Welty, Missouri Pacific R. R., Little Rock, Ark.

RAILWAY ELECTRICAL SUPPLY MANUFACTURERS' ASSOCIATION.—J. Scribner, General Electric Co., Chicago. Annual meeting with Association of Railway Electrical Engineers.

RAILWAY EQUIPMENT MANUFACTURERS' ASSOCIATION.—D. L. Eubank, Galena Signal Oil Company, Richmond, Va. Meeting with Traveling Engineers' Association.

RAILWAY FIRE PROTECTION ASSOCIATION.—R. R. Hackett, Baltimore & Ohio R. R., Baltimore, Md.

RAILWAY REAL ESTATE ASSOCIATION.—R. H. Morrison, C. & O. Ry., Richmond, Va.

RAILWAY SIGNAL ASSOCIATION.—(See American Railway Association, Division 4, Signal Section.)

RAILWAY STOREKEEPERS' ASSOCIATION.—(See American Railway Association, Division 6.)

RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION.—J. D. Conway, 1841 Oliver Bldg., Pittsburgh, Pa. Meeting with American Railway Association, Division 5.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Co., 30 Church St., New York.

ROADMASTERS' AND MAINTENANCE OF WAY ASSOCIATION.—P. J. McAndrews, C. & N. W. Ry., Sterling, Ill. Next annual convention, September 20-22, 1921, Chicago. Exhibit by Track Supply Association.

ST. LOUIS RAILWAY CLUB.—B. W. Frauenthal, Union Station, St. Louis, Mo. Regular meetings, 2d Friday in month, except June, July and August.

SIGNAL APPLIANCE ASSOCIATION.—F. W. Edmunds, Schroeder Headlight & Generator Co., New York City. Meeting with American Railway Association, Signal Section.

SOCIETY OF RAILWAY FINANCIAL OFFICERS.—L. W. Cox, 1217 Commercial Trust Bldg., Philadelphia, Pa.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.—A. J. Merrill, P. O. Box 1205, Atlanta, Ga. Regular meetings, 3d Thursday in January, March, May, July, September and November, Piedmont Hotel, Atlanta.

SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS.—E. W. Sandwich, Western Ry. of Ala., Atlanta, Ga.

SUPPLY ASSOCIATION OF AMERICAN RAILWAY TOOL FOREMEN'S ASSOCIATION.—C. N. Thulin, Duff Manufacturing Company, 935 Peoples Gas Bldg., Chicago.

TRACK SUPPLY ASSOCIATION.—W. C. Kidd, Ramapo Iron Works, Hillburn, N. Y. Meets with Roadmasters' and Maintenance of Way Association.

TRAVELING ENGINEERS' ASSOCIATION.—W. O. Thompson, N. Y. C. R. R., Buffalo, N. Y. Exhibit by Railway Equipment Manufacturers' Association.

Traffic News

At Vera Cruz, Mexico, the amount of freight lying on the docks awaiting transportation inland is said to amount to 40,000 tons. Locomotives, as well as cars, are lacking.

The Railway Commissioners of Canada have authorized a general increase in the freight rates on liquor, from first-class to double first-class; in carloads it is to be advanced to third-class.

The Indiana Coal Traffic Bureau, the Knox County Coal Operators' Association and the Southern Indiana Coal Bureau, said to represent 85 per cent of the coal tonnage mined in Indiana, have asked the Interstate Commerce Commission to withdraw its service order No. 18 regulating the assignment of cars for railroad fuel loading.

The house committee on interstate commerce has favorably reported a bill introduced by Representative Coady of Maryland, to extend the guaranty provisions of Section 209 of the transportation act for the six months following the period of federal control of the railroads to the Merchants' & Miners' Transportation Company. A similar bill has been introduced in the Senate by Senator Smith.

At Bridgeburg, Ont., which is just across the river from Buffalo, N. Y., the receipts at one ticket office recently increased rapidly from about $2,500 a month to $10,000 a month, this in consequence of large numbers of purchases by persons coming to Bridgeburg from Buffalo to begin their trip to some point in the United States, advantage being taken of the difference in the value of Canadian and American money. A rule has now been adopted under which these passengers, as soon as they come into the United States, are called upon by the conductor of the train for a payment sufficient to cover the difference in exchange and the full United States war tax.

Coal Production

A sharp decline again marked the production of soft coal during the week ended February 19 and for the first time since the market broke last December the output fell below even the level of 1919, according to the weekly bulletin of the Geological Survey. The total production is estimated from reports of railroad shipments at 7,472,000 net tons, or 5 per cent less than that for the preceding week. In the corresponding week of 1919 the output was 7,722,000 tons. The present rate of production is below the lowest point reached in 1920 during the railway switchmen's strike. With car and labor supply at present ample, the bulletin says, the factor limiting production is absence of demand.

New England Roads Ask Higher Mail Rates

The New England railroads have petitioned the Interstate Commerce Commission for a further increase in the rates for the transportation of the mails, on the ground that the rates prescribed by the Interstate Commerce Commission in its decision of December, 1919, are inadequate. During the original hearings before the commission on the subject of railway mail pay, the New England roads asked for rates 33⅓ per cent higher than those accorded to the railroads generally, on the ground of their higher operating expenses and the character of their service. The petition states that the rates of pay now in effect are not in conformity with the provisions of the law of July 28, 1916, under which the commission fixed the rates, in that they do not yield and since September 1, 1920, have not yielded them fair, reasonable or adequate compensation for the service performed. The commission is asked to re-examine the facts and circumstances surrounding the transportation of mail on the New England lines and the service performed by them, with special reference to the period since September 1, 1920.

Stock of Southeastern Express Company Taken by Business Men

Fairfax Harrison, president of the Southern Railway, announced on February 18 that the books for subscription to the million dollars of capital stock offered to the people of the south by the Southeastern Express Company were opened the previous morning and were closed at night. The stock was allotted proportionately to all the 14 states and the District of Columbia served by the lines of the Southern and the Mobile & Ohio. The reports received show oversubscription in every state, at least 2,500 widely distributed southern business men having taken shares. No single subscription in excess of 100 shares was received and no officer or employee of the railroads was permitted to participate.

"This result," said Mr. Harrison, "fully justifies our confidence that the people of the south desire competition in express service."

Transcontinental Freight by Water

Freight between places south of the Atlantic Coast and ports on the Pacific is now moving by way of the Panama Canal in an estimated volume of 250,000 tons a month. Rates by water are, on many commodities, about 25 per cent lower than by the transcontinental railroads. Since last August, when the Interstate Commerce Commission authorized a horizontal advance in the freight rates, the rail movement, especially of export freight, has been at a standstill. The coastwise steamship companies have increased the number of sailings until there is a departure of a freighter in the coastwise trade every day both eastbound and westbound. Eleven lines are operating from the Atlantic to the Pacific. With the marked depression in ocean freight rates, American ship-owners, unable to make profits on the transoceanic voyages, have placed their steamers in the coastwise trade. The Luckenbach Steamship Lines have made the voyage from the Atlantic to the Pacific in eighteen days, while the slower ships, owned by the Shipping Board and by some of the other companies, average from 24 to 26 days. Merchants say that the steamship companies have taken away from the railroads the eastbound movement of lumber from the Pacific Coast. In order to meet this competition the rail lines have announced reductions of seven cents per hundred pounds.

New England Roads Appeal to Governors

The presidents of the Boston & Maine, the New York, New Haven & Hartford, the Maine Central and the Bangor & Aroostook have asked the Governors of the six New England States to use their influence to aid the railroads in securing without delay authority to make a general advance of ten per cent in rates, both freight and passenger. At a conference in Boston on February 27, at which all of the Governors were present, the railroad representatives declared that the increase was made necessary because the roads were operating under a deficit of more than $27,000,000 a year and were failing by about $50,000,000 to earn 6 per cent annually on the conservative estimate of their values.

"In order that adequate and satisfactory transportation service may be assured to New England," a memorandum presented to the Governors said, "it is essential not only that the immediate solvency of these roads should be assured but also that their credit should be re-established * * *"

The Governors decided to appoint citizens' committees of five in each State to examine into the condition of the roads. Governor Cox, of Massachusetts, announced that the committees which would be named without delay, would convene in Boston probably "within the next ten days."

The railroads proposed to make the increase effective until February 28, 1922. It would not apply to coal and coke, switching charges, or export and import traffic in cases where the latter meets competition from other ports.

The executives told the Governors that although the proposed increases had been figured to provide $23,000,000 additional revenue this year, a decrease in the volume of traffic would cut that figure to about $18,000,000. Trunk lines might be generally relied upon to come to the aid of New England roads with payments aggregating $15,000,000 a year, subject to the approval of the Interstate Commerce Commission.

Commission and Court News

Interstate Commerce Commission

The Commission has suspended until June 29 the operation of proposed changes in rates on rough and sawed stone from Bedford and certain other Indiana points to Dexter and Poplar Bluff, Mo.

The Interstate Commerce Commission has suspended from March 3 until July 1 the operation of a uniform increase of 20 cents per net ton in the rates on coal, carloads, from points on the Cumberland Railroad to points in Florida.

The Commission has suspended until June 25 the operation of schedules which provide increased commodity rates on iron or steel bolts, in less than carload quantities, from Kansas City, Mo., to Galveston and Beaumont, Tex., and points taking same rates.

The Commission has suspended until June 28 certain tariffs providing rates to, from and between points south of the Ohio river, including Mississippi Valley, purported to be established in conformity with orders of the commission in the Memphis Southwestern Case.

The Commission has suspended until June 29 the operation of items in W. J. Kelly's tariff which provide increased carload rates on green salted hides from Chicago, Milwaukee and certain other western points to Old Fort and Morgantown, N. C. Johnson City, Tenn., and other points.

The Commission has suspended, until June 25, the operation of proposed increased rates on petroleum and its products from points in Arkansas and Louisiana to Memphis, Tenn., purported to be established in conformity with order of the Commission in the Natchez Case, Docket 8845, 58 I. C. C. 610.

The Commission has suspended until June 29 proposed increases in the charges (50 and 75 cents a car) for loading and unloading live stock at the stock yards, in Sioux City, Iowa, Omaha, East St. Louis, and at other points, to $1 and a proposed provision for the absorption of these increased charges by the carriers.

The Commission has suspended until June 29 the operation of certain schedules providing rates to, from and between points south of the Ohio river, including Mississippi Valley, purported to be established in conformity with orders of the Commission in the Memphis Southwestern case and the Murfreesboro case.

The Commission has suspended until June 29 the operation of items in a Kansas City Southern tariff which propose the cancellation by the Texarkana & Ft. Smith of the rule providing for the switching of carload shipments of lumber and timber to and from the tracks of the Texas & New Orleans, at Port Arthur, Tex.

The Commission has suspended until June 29, schedules published in a Union Stock Yard & Transit Company of Chicago tariff which propose to increase the existing charge of 75 cents for loading and 50 cents a car for unloading live stock at the Union Stock Yards, Chicago, to one dollar a car, and to provide for the absorption of such charges by the principal roads bringing live stock to the city.

The Commission has suspended until July 23 the operation of all schedules published in a supplement to a Minneapolis, St. Paul & Sault Ste. Marie tariff which name increased switching charges and proposed restrictions in the absorption on carload freight switched between industries on the line of the Minneapolis & St. Louis and the Railway Transfer Company of the City of Minneapolis and points of interchange with the Minneapolis, St. Paul & Sault Ste. Marie.

The Commission, on the petition of the Tennessee railroads, has ordered an investigation of the situation created by the re-

fusal of the Railroad and Public Utilities Commission of Tennessee to permit the carriers to increase their intrastate rates on common brick, sewer pipe, concrete and stone and gravel when for use in the construction of public highways and consigned to government authorities, to correspond with the increase permitted by the Commission for intrastate traffic.

State Commissions

The Railroad Commission of the State of Louisiana has taken up with the Interstate Commerce Commission the matter of the charge by the railroads of 50 to 75 cents on each passenger crossing the Mississippi River on railroad transfer boats.

The Northwestern Pacific has applied to the Railroad Commission of California for authority to lease a branch line in Mendocino County, Cal., known as the Albion branch, to the Albion Lumber Company. The lumber company agrees to operate this branch and to render the same service as that now given by the Northwestern Pacific.

The Public Service Commission of Missouri has acted upon the application of the carriers in the state for authority to make increases in freight and passenger rates similar to those prescribed by the Interstate Commerce Commission, by ordering that the temporary increases authorized in August, 1920, shall be effective for a period of 12 months from September 1, 1920. The order provides that at the expiration of this twelve-month period, the basis of the rates shall be restored to that in effect on February 29, 1920, unless extended or changed by the commission.

State Rates Advanced

The Interstate Commerce Commission has rendered its decision in the Indiana, Nebraska and South Carolina intrastate rate cases ordering advances in the intrastate rates to correspond to those allowed by the interstate commission in the general rate advance case.

Overcharge Claims

The Interstate Commerce Commission announces that on February 17 the Railroad Administration notified the railroads that claims against the director-general for overcharges in connection with freight, passenger, demurrage, storage, etc., should be no longer accepted. Claimants must file such claims with the Interstate Commerce Commission.

The circular says: "A statement of unsettled overcharge claims on hand shall be prepared and filed with the Interstate Commerce Commission on or before February 28, 1921. Such statements shall be entitled 'Claims against Director General, as Agent, for alleged violation of Section 6.' . . . Such claims shall be handled to conclusion in accordance with established practice. Statements shall be rendered to the Interstate Commerce Commission monthly showing disposition of each claim settled or rejected during the month."

The commission says that these instructions were issued after conference with the commission, and that it will co-operate in the effort to make the plan inexpensive and expeditious.

Court News

In an action under the federal Employers' Liability Act to recover for the death of a repair man in the signal department who, while engaged in oiling a switch, was run over by an engine running backwards, the Pennsylvania Supreme Court holds that the failure of the engineman to give the customary warning was unusual and unexpected, not to be ordinarily foreseen, and the risk of which was not assumed by the employee.—Dutrey v. P. & R. (Pa.), 108 Atl. 620.

The Pennsylvania Supreme Court holds that an ashpit used as a mere yard convenience for the purpose of cleaning and overhauling engines after completing their day's run and putting them in condition for subsequent use for either state or interstate traffic is not an instrumentality of interstate commerce.—Reynolds v. P. & R. (Pa.), 109 Atl. 660; certiorari denied, 252 U. S. 507.

Foreign Railway News

Spanish Northern Will Electrify

The Spanish Northern is asking for bids, through the Spanish government, for materials to electrify a portion of its line, according to cable advices from Commercial Attache Cunningham at Madrid. Bids will be opened also on April 22 covering the construction of a steam railway from Soria to Castejon. It is also said that the government will soon be in the market for more cars and locomotives.

Chinese Railway Manager Visits America

Dr. Yen Te-Ching, managing director of the Canton-Hankow Railway, arrived in San Francisco February 8. It is understood that he intends to make an investigation of railway and lake transportation in this country and that he will avail himself of all opportunities afforded to visit plants where quantity production is demonstrated.

France Borrowing Money for Equipment

New York investment houses are offering to the public 6 per cent bonds to the value of 50,000,000 francs of the Paris-Orleans Railway. These bonds are guaranteed by the French government and will net about $65.50 per 1,000 franc bond, at the prevailing rate of exchange and at the prevailing price of 92. The proceeds of this loan, it is understood, will be expended in this country for locomotives and cars.

Work Started on New Mexican Line

The Mexican government has begun the construction of a line to extend from Durango, capital of the state of that name, to Mazatlan on the Pacific coast. Work has commenced on the Mazatlan end of the line. The proposed railway has been laid off in sections of 10 kilometers each. The construction offices are located at Mazatlan. Work will soon begin at Durango, also, it is said. It is estimated that from two to three years will be required to complete the work.

English Firm Secures Contract for Repairing Russian Locomotives

LONDON.

Sir W. G. Armstrong, Whitworth & Co., Ltd., has signed a provisional contract for the repair of locomotives in Russia. It is estimated that 50 per cent of the locomotives owned by the Russian railways are in need of repairs and that the contract will amount to many thousands of engines. The work is to be done at the company's Scotswood Works and arrangements are being made to bring 20 locomotives a month to the works for some years.

Chinese Eastern Asks Bids for Tie Treating Plant

The Chinese Eastern is asking for bids from this country for the construction of a "sleepers impregnation works" (tie treating plant). The proposed plant is to be, insofar as is possible, on wheels so that it may be moved from place to place with little difficulty. Any company bidding on the plant will be expected to offer also bids for its operation during the first year. The bids are open until June 1. Plans and specifications may be obtained from Engineer Alexandroff, Chief of Maintenance of Way and Works, Chinese Eastern Railway, Harbin, Manchuria.

Committee Reports on English Railway Agreements

LONDON.

The Colwyn Committee, made up of members of Parliament, which was to investigate and report on the various agreements made by the government with the railways dur-

ing the period of government control, has made an extended report in which it it estimated that the total claims of the railways covering arrears of maintenance, abnormal wear and tear and replacement of stores will amount to £150,000,000 (approximately $600,000,000 at the current rate of exchange). The Committee has indicated that these claims are more than what the railways should receive. The committee feels that the existing agreements should not be given their legal interpretation but should be considered in the light of the circumstances under which they were made and that the spirit of the agreements should govern their interpretation. It is claimed by the committee that some of the railways have already received more than they rightly should for deferred maintenance.

Railway Supply Exports in 1920

The exports of steam locomotives and passenger cars in 1920 were greater than in any previous year. The totals for the exports of all other railway materials, however, fell considerably below similar totals for 1919. The detailed figures, as reported by the Bureau of Foreign and Domestic Commerce, follow:

	1920		1919	
Railroad spikes	37,185,246 lb.	$1,607,672	55,487,231 lb.	$2,896,073
Steel rails	594,634 tons	36,066,505	652,443 tons	38,986,855
Switches, frogs, etc.	....	7,569,420	....	9,280,725
Steam locomotives	1,711	53,629,847	959	30,275,728
Passenger cars	123	1,171,674	104	1,606,540
Freight cars	21,676	37,192,502	27,317	57,473,824
Car wheels and axles	....	9,061,305	....	11,843,738

Locomotives to Be Built in Poland

London.

It is stated by the Warsaw correspondent of the London *Times* that with the object of encouraging home industries the Polish government has recently signed contracts with a number of manufacturers in Poland for the delivery of large quantities of rolling stock for the Polish railways within the next 10 years. The firms chiefly concerned are the Polish Locomotive Works, Sosnowice, which has received an order for 1,100 locomotives; Lilpop, Rau & Lowenstein, Warsaw, which has received an order for 1,000 locomotives, 20,000 freight cars and 3,000 passenger cars; and the Ostrow Wagon Works, which has received an order for 18,000 freight cars and 2,800 passenger cars. None of these firms are in a position to carry out these orders with their present plants. The Polish Locomotive Works does not at present build complete locomotives, although it manufactures locomotive boilers. Neither has the Lilpop, Rau & Lowenstein plant built locomotives previously. The Ostrow Works is an entirely new enterprise and its factory is still in course of construction. Obviously these firms will need foreign capital and machinery to enable them to complete their orders.

Locomotive Exports in December

The figures for the exports of steam locomotives in December show a total of 154 valued at $4,746,907. This is the largest figure in point of number since September and in point of value since August. The largest exports in December to any one country were for Cuba. These shipments totaled 52 and were valued at $1,593,023. The detailed figures by countries, as compiled by the Bureau of Foreign and Domestic Commerce, follow:

Countries	Number	Dollars
Canada	8	121,046
Honduras	1	3,525
Salvador	3	61,550
Mexico	4	33,000
Jamaica	1	14,350
Cuba	52	1,642,160
Argentina	7	297,500
Brazil	46	1,593,023
Chile	1	10,000
Colombia	1	2,000
China	6	383,024
Dutch East Indies	4	19,000
Japan	5	33,500
New Zealand	1	11,000
Philippine Islands	2	14,900
Egypt	12	507,329
Total	154	4,746,907

Equipment and Supplies

Locomotives

The Peking-Suiyuan is inquiring through the locomotive builders for 26 locomotives.

The Atchison, Topeka & Santa Fe is inquiring for 10 Pacific, 15 Mikado, 15 Mountain and 10 Santa Fe type locomotives.

The Colombian Northern (South America) reported in the *Railway Age* of January 28, as inquiring for some 2-8-2 type locomotives, has ordered one locomotive from the American Locomotive Company.

Freight Cars

The American Smelting & Refining Company, New York, is inquiring for 15 ore cars of 60 tons capacity.

The Honolulu Iron Works Company, Woolworth building, New York, is inquiring for 30 cane cars of 30 metric tons capacity, for export.

The United Fruit Company, New York, reported in the *Railway Age* of January 7, as inquiring for 40 box and 40 flat cars, has ordered 50 box and 40 flat cars, of 20 tons capacity, from the Gregg Company, for use on its division at Banes, Cuba.

Passenger Cars

The Carnegie Steel Company is inquiring for one all-steel paycar.

The Union Pacific, reported in the *Railway Age* of December 24, as inquiring for 14 dining cars, has ordered this equipment from the Pullman Company.

Iron and Steel

The Indianapolis Terminal has ordered 500 tons of rails from the Illinois Steel Company.

The Honolulu Iron Works Company, Woolworth building, New York, is inquiring for 300 tons of light rails and accessories, for export to Honolulu.

The Delaware, Lackawanna & Western is advertising for bids to be received until noon March 9, on serial contract No. 13, for fabricated steel plate work for the following: Washington, N. J., bridge, 170 tons; Cortland, N. Y., grade elimination, 64 tons; Coventry, N. Y., bridge, 56 tons; Sherburn, N. Y., bridge, 101 tons; Buffalo, N. Y., bridge at Delavan avenue, 1,515 tons.

Track Specialties

The Indianapolis Terminal has ordered 100 per cent rail joints from the Rail Joint Company for 500 tons of rails ordered from the Illinois Steel Company.

The Atchison, Topeka & Santa Fe has ordered 100 per cent rail-joint equipment from the Rail Joint Company for 100,000 tons of rails purchased for installation in 1921.

The Boston & Maine will receive bids until noon March 14 on Inquiry No. 3,578; 600 kegs 7/8 by 4 3/4 track bolts, for delivery at Salem, Mass., and 550 kegs 1 in. by 5 1/4 track bolts, delivered, Fitchburg, Mass.

The Boston & Maine will receive bids until noon March 14 on Inquiry No. 3,579; 15,360 joints for 100 lb. rail, for delivery at Fitchburg, Mass., and 28,000 joints for 85 lb. rail, for delivery at Salem, Mass.

The Boston & Maine will receive bids until noon March 14 on Inquiry No. 3,551; 320,000 tie plates for 100 lb. rail, for delivery at Fitchburg, Mass., and 325,000 tie plates for 85 lb. rail, 47,000 for 75 lb. rail, and 8,000 for 72 lb. rail, for delivery at Salem, Mass.

Supply Trade News

W. J. Roehl, formerly assistant purchasing agent on the Missouri Pacific, has been appointed sales representative in the St. Louis, Mo., district for **A. M. Castle & Co.**

The Independent Pneumatic Tool Company, Chicago, on February 26, removed its Pittsburgh, Pa., office from 1208 Farmers Bank building, to 718 Bessemer building, corner of Fort and Duquesne Way.

Marcel Garsaud has been appointed New Orleans sales agent of the Whiting Corporation, Harvey, Ill., succeeding J. S. Barelli. Mr. Garsaud's office is in the Whitney Central Bank building, New Orleans, La.

Dwight P. Robinson & Company, Inc., engineers and constructors, New York, recently opened branch offices in the Dominion Express building, Montreal, Que. **Alexander C. Barker,** vice-president, is in charge of the office.

Robert C. Weller has been appointed general sales manager of the **Lakewood Engineering Company,** Cleveland, Ohio, and **Carlton R. Dodge** has been appointed western sales manager, with headqurters at 1215 Lumber Exchange building, Chicago.

The O'Malley-Beare Valve Company of Chicago has been appointed exclusive agent for the **Chapman Valve Manufacturing Company** of Indian Orchard, Mass., and will have charge of the sale of the Chapman lines of valves in the railway field in the United States.

William C. Wilson, formerly connected with the Taylor-Wharton Iron & Steel Company and William Wharton, Jr., Company, in the capacity of manager of sales, northeastern territory, has become associated with the **Pittsburgh Screw & Bolt Company,** Pittsburgh, Pa. He will be located at its New York Office, 50 East Forty-second street.

Roy G. Owens, vice-president and general manager of sales of the **Lakewood Engineering Company,** Cleveland, Ohio, is now giving his entire time to the executive department and **Robert C. Weller,** assistant general manager of sales at Cleveland, has been promoted to general manager of sales, succeeding Mr. Owen, effective February 25. **Carlton R. Dodge,** manager of field sales at Cleveland, has been appointed Western sales manager with headquarters in the Lumber Exchange building at Chicago, effective March 1.

The Liberty Car & Equipment Company and the Illinois Car & Manufacturing Company, both of Hammond, Ind., have been consolidated and will now conduct their joint business under the name of the **Illinois Car & Manufacturing Company,** with general offices at Hammond, Ind., the officers of the consolidated company are: P. H. Joyce, president; J. W. O'Leary, vice-president; J. F. Farrell, vice-president; J. E. Fitzgerald, treasurer, and O. R. Shearman, secretary. The plant at Chicago Heights will be known as the Liberty plant and the one at Hammond as the Hammond plant.

After March 1, the Richmond, Va., office of the **Vapor Car Heating Company, Inc.,** will be discontinued and all future business from the Southeastern territory will be handled from the offices of the company in Washington, D. C. The Washington office is in charge of **Harry F. Lowman,** who will be assisted by **L. B. Rhodes, Jr.,** previously connected with the sales department of the U. S. Light & Signal Corp. Mr. Rhodes, Jr., has been assigned to the Southeastern territory formerly handled by his father, L. B. Rhodes, whose death was noted in the *Railway Age* of February 4 (page 348).

The **Millholland Sales & Engineering Company** has been organized at Indianapolis, Ind., by **W. K. Millholland,** formerly president and general manager of W. K. Millholland Machine Company, Indianapolis, and **Ernest Millholland,** formerly works manager of that company, to handle machine tools. **W. K. Millholland** was educated in mechanical engineering at Lewis Institute, Chicago, and entered business with the International Machine Tool Company at Indianapolis as a draftsman. After two years' service with this company he went with the Warner and Swasey Company at Cleveland, Ohio, as a designer, and after serving this company for four years, was appointed sales engineer for several large machine tool companies. Not long thereafter he took over the management of the W. K. Millholland Machine Company, which company he had been with for six years. **Ernest Millholland** was educated in mechanical engineering at Lewis Institute, Chicago, and then attended the University of Illinois for two years. On leaving college he entered the service of the W. K. Millholland Machine Company, where he has served as works manager for the past ten years.

E. E. Hudson, vice-president and general manager of the **Waterbury Battery Company,** Waterbury, Conn., has been elected president of the company to succeed Charles B. Schoenmehl, deceased, and **Francis T. Reeves** has been elected treasurer. Mr. Hudson for the past 22 years, with the exception of a little over a year's time, has been in the sales and managerial departments of concerns manufacturing primary batteries and has been identified with the installation of the primary battery. In July, 1898, he served as chief clerk in the primary battery sales department of the Edison Manufacturing Company, remaining in that position until June, 1902. Shortly afterward, he served as an accountant in the controller's department of the United States Steel Company. In December, 1903, he became secretary and treasurer of the Battery Supplies Company, Newark, N. J., and in 1905 was appointed sales manager of that company. When the Edison company absorbed the Battery Supplies Company, in 1908, he was appointed assistant manager of sales in the primary battery department. He became sales manager of that department in February, 1909, and in September, 1913, was elected also vice-president. In October, 1914, in addition to these duties, he was given charge of the manufacturing, as well as the sales, and in March, 1915, was made division manager in general charge of the entire primary battery business of Thomas A. Edison, Inc. In 1914, he was chairman of the Railway Telephone & Telegraph Appliance Association and in 1916, he was chairman of the Signal Appliance Association, previously having been a director. He also served for seven years as a director of the National Appliance Association, which is to the American Railway Engineering Association what the Signal Appliance Association is to the Railway Signal Association. On January 1, 1917, he was elected vice-president and general manager of the Waterbury Battery Company and now becomes president of the same company.

E. E. Hudson

Railway Steel-Spring Company

The annual report of the Railway Steel-Spring Company for the year ended December 31, 1920, contains a consolidated income account which includes the Canadian Steel-Tire & Wheel Company, Ltd. This shows the net earnings for the year to be $4,435,350. After deducting a reserve of $1,000,000 for taxes and $2,025,000 for dividends (7 per cent on the preferred stock and 8 per cent on the common), there was left a surplus of $1,410,350 for the year.

President F. F. Fitzpatrick speaking to the stockholders in the report says: "The results of the Canadian subsidiary were

entirely satisfactory and fully justified the establishment of the plant at Montreal.

"The financial condition of your company continues to show improvement and it is expected that the results for the year 1921 will be satisfactory. The fore part of the year will, no doubt, be a period of readjustment and stabilization, while the last half of the year will probably show an improvement in the general business conditions."

Locomotive Superheater Company

The election of three new vice-presidents is announced by the Locomotive Superheater Company, New York. Gilbert E. Ryder, in charge of the service department, has been elected vice-president in charge of sales, with office at New York; Henry B. Oatley, chief engineer, has been elected vice-president in charge of engineering, with office at New York, and Charles H. True, works manager, has been elected vice-president in charge of production, with office at East Chicago, Ind.

Gilbert E. Ryder, vice-president in charge of sales, was born at Minneapolis, Minn., in 1880, and studied engineering at the University of Wisconsin, and also at the University of Illinois. His railroad experience began with an apprenticeship on the Chicago, Milwaukee & St. Paul, and included service as a journeyman in the mechanical department of that road at Dubuque, Ia.; Ottumwa, Ia., and West Milwaukee, covering five years. His engineering experience followed in the fuel testing bureau of the Technologic Branch of the United States Geological Survey. He later served the city of Chicago as deputy smoke inspector in charge of locomotives, which placed him again in contact with the locomotive fuel conservation problem. This was followed by editorship of the Railway Review at Chicago, after which he entered the service of the Locomotive Superheater Company ten years ago. He became a member of the service department and later took charge of that department. He also developed and had charge of the publicity department. Mr. Ryder takes responsibility of the sales of the company (railroad, stationary and marine), with an unusual preparation in wide and very valuable engineering and practical experience.

Henry B. Oatley, vice-president in charge of engineering, was born at Rochester, N. Y., and attended the public schools at that place. He received his engineering education at the University of Rochester and the University of Vermont, graduating from the latter in 1900 with the degree of mechanical engineer. He then entered the service of the Schenectady Locomotive Works, his experience while on this work embracing locomotive design and shop testing. He was associated with F. W. Cole in the early development of the superheater for locomotives by that company. In 1910, upon the formation of the Locomotive Superheater Company, he was appointed mechanical engineer, and in 1916 he was appointed chief engineer for the company, which position he held at the time of his election, as above noted. In April, 1917, he was granted a leave of absence and served as an officer in the U. S. Navy on the battleships Ohio and Indiana. He entered service with the 1st N. Y. Naval Militia, which was the first body of armed troops to move after the declaration of war with Germany. Mr. Oatley is a recognized authority on superheating and has been an active factor in its development. He is, in a large measure, responsible for putting superheater design upon a practical operating and manufacturing basis in locomotive, marine and stationary practice, and, without sacrifice of efficiency, has developed uniformity of sizes and design.

Charles H. True, vice-president in charge of production, was born in Boston, Mass., and was educated at the public schools of Schuyler, Neb., and the University of Nebraska, graduating in 1898 with the degree of electrical engineer. Immediately upon graduation he entered the service of the Union Pacific at Omaha, and served in both the locomotive and car shops. In 1902 he became roundhouse foreman at Grand Island, Neb., and in 1903 resigned from the Union Pacific to take a similar position at Trenton, Mo., with the Chicago, Rock Island & Pacific. In October of the same year he was transferred to the Silvis shops as assistant superintendent of shops. In 1905 he was appointed mechanical engineer with the Railway Materials Company, at Chicago, and was engaged in the design of metallurgical furnaces for blacksmith shops and boiler shops. In 1910 he refitted and took charge of the Phoenixville, Pa., plant of this company. Two years later he resigned his position with the Railway Materials Company to become works manager of the Locomotive Superheater Company at East Chicago, which position he held until his election as vice-president, as above noted.


G. E. Ryder


H. B. Oatley


C. H. True

Pressed Steel Car Company

The earnings from operations of the Pressed Steel Car Company for the year ended December 31, 1920, were $3,060,985. Dividends on stocks and money from other sources brought the gross earnings for the year up to $3,194,278. From this there was deducted $662,472 for depreciation, obsolescence, etc., leaving a net of $2,531,805. Dividends amounting to $1,875,000 were paid during the year. The working capital—surplus and undivided profits—on December 31, 1920, was $15,120,993.

The annual report signed by President F. N. Hoffstot says: "The year 1920 was a difficult one for all manufacturers, and especially for our class of business. . . . In the early Fall it looked as if there would be a considerable buying movement, but the action of the government in failing to make partial payments tied the railroads' hands and has made it very difficult for them to carry out their commitments and has prevented them from entering into new ones. About 60,000 cars were ordered during the year and 25 per cent of these were bought by private owners in order to protect the execution of their obligations. This condition of affairs, with inefficiency and lack of co-operation on the part of labor, has helped to bring about a depression which will last until there is a readjustment. . . . The government has granted rates which, with old-time efficiency, would produce earnings ample to take care of improvements and betterments, but when the same government fails to promptly pay its debts, and make good the depletion of properties loaned to it during the war period, it paralyzes all the advantages from the increased rates. The public, as usual, pays the bill."

Railway Construction

ATCHISON, TOPEKA & SANTA FE.—This company and the California, Arizona & Santa Fe have been authorized by the Interstate Commerce Commission to abandon a part of the Barnwell branch in San Bernardino County, Cal., extending from mile post 30, near Barnwell, to Ivanpah, a distance of 15.18 miles.

BALTIMORE & OHIO.—This company is preparing plans, in co-operation with the city of Dayton, Ohio, for the construction of a viaduct 60 ft. long over the railroad tracks at Springfield Pike, Dayton. A definite time for undertaking the project has not yet been decided on.

CHICAGO UNION STATION.—The announcement in the *Railway Age* of February 18 (page 437), that this company was accepting bids for the construction of a new railway mail terminal between Harrison and Van Buren streets and the Chicago river at Chicago, was partially incorrect. The company was accepting bids for the excavation work in connection with this project and has awarded a contract for the work to the Chicago Foundation Company, Chicago.

CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS.—This company has prepared plans, in co-operation with the city of Springfield, Ohio, for a subway to eliminate a grade crossing on Main street, Springfield.

ILLINOIS CENTRAL.—This company will extend nine passing tracks on the Paducah district between Central City and Paducah, Ky., at an approximate cost of $75,000. The company has also authorized the extension of passing tracks on the Dubuque district between Freeport, Ill., and Waterloo, Ia., at an estimated cost of $65,000. A new 100-ft. turntable will be installed at Waterloo, Ia., at an estimated cost of $45,000, and another new 100-ft. turntable will be installed at Dubuque, Ia., costing $35,000. The company will build two bridges at Council Hill, Ill., to cost $30,000 each.

INTERSTATE.—This company has been authorized by the Interstate Commerce Commission to construct an extension from Norton, Wise County, Va., to a point about 9 miles west of St. Paul in Scott County, a distance of about 25 miles, and a branch line therefrom extending from Coeburn up a stream called Tom's Creek, a distance of 15 miles.

JEFFERSON & NORTHWESTERN.—This company is constructing a freight and passenger station, with facilities also for the general office, at Jefferson, Tex., to replace the joint facilities now being used with the Missouri, Kansas & Texas.

KENTUCKY & TENNESSEE.—This company has applied to the Interstate Commerce Commission for a certificate of convenience and necessity authorizing the construction of an extension in McCreary County, Kentucky, 2½ miles.

PACIFIC FRUIT EXPRESS.—This company will build an icing plant at Council Bluffs, Iowa, with a capacity of 50 cars a day.

TEXAS & PACIFIC.—This company contemplates improvements and additions to its terminal facilities at Ft. Worth, Tex., including new yards, a new freight house and additions to its shops.

TOLEDO, ST. LOUIS & WESTERN.—This company has awarded a contract for a 300-ton all-steel coaling station, with sanding facilities, at Delphos, Ohio, to the Ogle Construction Company, Chicago.

THE PACIFIC RAILWAY CLUB will hold its annual election of officers at Oakland, Cal., on March 10. The following members have been nominated: For president, G. H. Harris, general superintendent, San Francisco-Oakland Terminal Railway; for first vice-president, F. S. Foote, professor of railroad engineering, University of California; for second vice-president, J. N. Clark, chief of fuel bureau, Southern Pacific; for treasurer, G. H. Baker, assistant general freight agent, Atchison, Topeka & Santa Fe.

Railway Financial News

ATLANTA, BIRMINGHAM & ATLANTIC.—*Receivership.*—Col. B. L. Bugg, president of this road, was appointed receiver on February 25 by Judge S. H. Sibley in the United States District Court at Atlanta. The order was issued on petition of the Birmingham Trust & Savings Company of Birmingham, Ala., which alleged that it held a note for $90,000 due March 7 which the road was unable to pay. In its petition the Birmingham Trust & Savings Company said that while the road's gross receipts were $9,000 per mile per year, it was losing $100,000 per month.

The Atlanta, Birmingham & Atlantic operates 640 miles of line in Georgia. Its receivership is the climax of the wage controversy caused by a notice of the company issued December 29 making a cut of 50 per cent on all increases given to the employees since December, 1917. The case was taken before the Railroad Labor Board as noted in the *Railway Age* of February 11, page 367, and February 18, page 411. Latest developments in the dispute may be found on another page of this issue.

CHICAGO & EASTERN ILLINOIS.—*Sale Postponed Again.*—The sale of this road, set for March 1, has been postponed again owing to disagreement between holders of the company's two chief defaulted bond issues on the price to be paid for the company to be formed to take over the road.

CHICAGO, BURLINGTON & QUINCY.—*Stockholder Comments on I. C. C. Decision.*—Robert J. Frank, a minority stockholder of the Chicago, Burlington & Quincy, who opposed the proposed issue by the road of bonds to be distributed as a dividend, commenting on the decision of the Interstate Commerce Commission against such an issue, said:

> In event that the Great Northern and Northern Pacific Railways are now unable to perfect plans for refunding so-called C., B. & Q. joint 4s when they become due, without the aid of the Burlington company, holders of these bonds need not necessarily suffer any loss in consequence of the Interstate Commerce Commission decision. On the contrary, if these bondholders act collectively they may avail themselves of the provision in collateral trust agreements whereby C., B. & Q. stock pledged thereunder can be appropriated by holders of joint bonds. Such course would avoid any financial disturbance, and not unnecessarily embarrass either of the northern lines. It is my opinion that a merger or consolidation of Great Northern with the Burlington system should now be undertaken.

CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS—*Asks Authority to Purchase Road.*—This company has applied to the Interstate Commerce Commission for authority to acquire the capital stock of the Evansville, Indianapolis & Terre Haute.

DENVER & RIO GRANDE.—*Stockholders Lose on Appeal.*—The United States Circuit Court of Appeals on February 28 affirmed the action of the Federal District Court of Denver in denying stockholders of the Denver & Rio Grande the right to intervene in the case of the Equitable Trust Company of New York, in which the latter obtained an order for the sale of the road.

ERIE.—*Asks Authority to Issue Equipment Trusts.*—This company has applied to the Interstate Commerce Commission for such authority as may be necessary for an equipment trust agreement entered into before the effective date of the provisions of the Transportation Act relating to the issuance of securities, providing for the issuance of $4,600,000 equipment trust certificates to be delivered to the Standard Steel Car Company for equipment upon the delivery of the cars.

LEHIGH VALLEY.—*Order to File Dissolution Plan in Sixty Days.*—The mandate of the United States Supreme Court ordering the dissolution of the combination effected by the Lehigh Valley Railroad Company, the Lehigh Valley Coal Company, the Lehigh Valley Coal Sales Company, Coxe Bros. & Co., Inc., Delaware, Susquehanna & Schuylkill Railroad Company, has been filed in the United States District Court for the Southern District of New York. The District Court has issued a temporary decree ordering dissolution of the combination within 60 days.

The companies are given by the decree of the court 60 days in which to file a plan with the Federal Court for the dissolution of the combination, "with such provisions for disposition of all shares of stocks, bonds or other evidence of indebtedness and all property of any character of any one of said companies, owned or in any manner controlled by any other of them as

may be necessary to establish their entire independence of one from each other. If defendants shall fail to file a plan within the period stated the court will take such further steps as may be deemed necessary to dispose of the stocks and bonds referred to and dissolve effectually the unlawful combination so as to recreate out of the elements composing the combination a new situation in harmony with the law."

LOUISVILLE & NASHVILLE.—*Authorized to Issue Bonds and Equipment Trusts.*—The Interstate Commerce Commission has authorized this company to issue $3,500,000 of first mortgage 50 year, 6 per cent bonds, to be dated March 1, 1921, and to exchange them so far as possible for 6 per cent first mortgage bonds maturing March 1, 1921, and to sell any remaining bonds to J. P. Morgan & Co. at not less than 99. Authority was also granted to the Southeast & St. Louis to assume obligations in respect of these bonds by executing a first mortgage upon its property and franchise. The Louisville & Nashville has also been given authority by the commission for the issuance of $11,025,000 of equipment trust certificates to be sold on a basis not exceeding 7 per cent, for the purchase of equipment at an estimated cost of $14,933,379.

PENNSYLVANIA RAILROAD.—*Application to Lease New York, Philadelphia & Norfolk.*—This company and the New York, Philadelphia & Norfolk have filed a joint application with the Interstate Commerce Commission authorizing the lease to the Pennsylvania of the railroad property and franchises of the New York, Philadelphia & Norfolk for 999 years from July 1, 1920. The entire capital stock of the company is owned by the Pennsylvania.

PENNSYLVANIA.—*Annual Report.*—The annual report for the year ended December 31, 1920, which was published on Monday, shows a net income of $32,801,673, a decrease of $10,066,425, as compared with the year 1919. Other important figures shown in the income statement are as follows:

	1920.	*1919.
Government compensation for January and February, 1920	$13,156,968	......
Income accrued March 1—August 1, 1920	37,981,814	......
Net railway operating income	11,965,085	......
Total compensation and net railway operating income	63,103,867	4,022,596
Total non-operating income	24,562,834	671,072
Gross income	87,666,701	4,693,668
Total deductions from gross income	54,865,028	5,372,757 (in.)
Net income	32,801,673	10,066,426
Sinking fund	2,239,790	176,887
Dividends	29,950,404	300
Balance of income for the yeear	611,479	9,889,238

*Decrease shown in every item except total deductions from gross income.

This report will be treated more fully in next week's issue of the *Railway Age*.

PEORIA & PEKIN UNION.—*Guarantee of Notes.*—The Interstate Commerce Commission has authorized the Lake Erie & Western, the Peoria & Eastern, the Chicago, Peoria & St. Louis and the Chicago & North Western to assume liability as guarantors for the payment of the principal and interest of 5 separate notes aggregating $1,529,150, to be issued by the Peoria & Pekin Union, payable to the Secretary of the Treasury, for a loan of $1,799,000 from the revolving fund.

READING.—*Hearing on Dissolution Plan.*—At a hearing in the United States District Court at Philadelphia before Judges Buffington, Wooley and Davis, on March 1, representatives for the common stockholders presented petitions for leave to intervene, and suggestions for modification of the dissolution plan recently filed, as noted in the *Railway Age* of February 18, page 425. J. D. White, appearing for the Prosser committee in behalf of the common stockholders, asked a modification of the plan, providing that the Reading Company reduce its capital stock.

C. C. Leffingwell, of New York, appearing for the railroad, and A. F. Myers, special attorney general, approved of the railroad plan with modifications. Mr. Myers said that the government would be compelled to ask the court for a strict compliance with the mandate of the U. S. Supreme Court that the Jersey Central stock be disposed of within a reasonable time. He said the Transportation Act provided for a consolidation of railroads after leave granted by the Interstate Commerce Commission, and such matters and formalities take so long a time that the government would have to insist that the dissolution plan of the Reading and Central of New Jersey be effected as promptly as possible.

After hearing the discussion the court decided not to pass on the case but gave the stockholders two weeks to intervene in the proceedings.

The following statement was made by Seward Prosser, president of the Bankers' Trust Company, as chairman of the committee representing Reading common stock:

"As the committee views the situation, the plan in effect, though not in form, distributes to the preferred and common stockholders alike the existing earned surplus of over $30,000,000, in which the preferred stock, except on dissolution, has no interest. The elimination from the statement of such surplus will result from the proposed plan of complying with the decree requiring the segregation of the coal and iron company's property. The equities between the stocks can be maintained, in the opinion of the committee, by a proper reduction of the capital stock of the corporation spread over all classes of stock alike."

ST. PAUL AND KANSAS CITY SHORT LINE.—*Asks Authority to Issue Bonds.*—This company has applied to the Interstate Commerce Commission for authority to issue $619,000 of first mortgage gold bonds at 4½ per cent interest to reimburse the treasury for expenditures. The bonds are to be delivered to the Chicago, Rock Island & Pacific.

SEABOARD AIR LINE.—*Loan Approved.*—The Interstate Commerce Commission has approved a loan of $1,173,500 to this company to enable the company to meet its maturing indebtedness.

SOUTHERN.—*Asks Authority to Pledge Bonds for Security.*—This company has applied to the Interstate Commerce Commission for authority to pledge and repledge from time to time as security for short term notes all or any part of $7,229,000 of its development and general mortgage 4 per cent gold bonds payable April 1, 1956, which have been nominally issued and are held unincumbered in its treasury.

TEXAS CITY TERMINAL.—*Asks Authority to Issue Certificates.*—This company has applied to the Interstate Commerce Commission for authority to issue $1,984,300 of first mortgage 20 year, 6 per cent bonds and $500,000 of common stock, to be delivered, with the exception of directors' shares, to A. S. Peabody, in payment for the railway and terminal property formerly owned by the Texas City Transportation Company, which was in part leased to and operated by the Texas City Terminal Railway to March 17, 1920. On that date the mortgage was foreclosed and the property was later sold to Mr. Peabody.

TEXAS MIDLAND.—*Asks authority to issue bonds.*—This company has applied to the Interstate Commerce Commission for authority to issue bonds to the amount of $500,000 or such part thereof as is necessary to cover the construction of an extension of 14 miles.

THE ST. LOUIS-SAN FRANCISCO.—*Asks Authority to Sell or Pledge Bonds.*—This company has applied to the Interstate Commerce Commission for authority to issue and sell or pledge from time to time $4,232,000 prior lien mortgage, 6 per cent gold bonds, dated July 1, 1928. It is stated that there are no present plans for the disposition of the bonds, but that it is proposed to sell them at not less than 90 or pledge them at not less than 75.

WASHINGTON & LINCOLNTON.—*Asks Authority to Issue Notes*—This company has applied to the Interstate Commerce Commission for authority to issue three short term notes to the amount of $13,000, to the Atlantic Coast Line and the Louisville & Nashville.

WHEELING & LAKE ERIE.—*Asks Authority to Pledge Securities as Collateral.*—This company has applied to the Interstate Commerce Commission for authority to pledge as collateral for short term notes which may be issued from time to time any bonds, stocks or other securities which now are or may be held in its treasury.

Dividends Declared

Boston & Albany—Two per cent, quarterly, payable March 31 to holders of record February 28.

Buffalo & Susquehanna—Common, 1¾ per cent, quarterly, payable March 31 to holders of record March 16.

Fonda, Johnstown & Gloversville—Preferred, 1½ per cent, quarterly, payable March 15 to holders of record March 10.

Pittsburgh, Ft. Wayne & Chicago—Common, 1¾ per cent, quarterly, payable April 1 to holders of record March 10; preferred, 1¾ per cent, payable April 5 to holders of record March 10.

Railway Officers

Executive

J. L. Wilkes, general manager of the Jacksonville Terminal, Jacksonville, Fla., has been elected president and a director of the company.

Financial, Legal and Accounting

C. E. Coomes has been appointed auditor of the Florida East Coast, with headquarters at St. Augustine, Fla., effective February 21, succeeding E. Y. Quinn, Jr.

Arthur L. Parmelee, whose appointment as auditor and assistant secretary of the Grand Rapids & Indiana, with headquarters at Grand Rapids, Mich., was noted in the *Railway Age* of January 28 (page 309), was born at Grand Rapids, Mich., on June 7, 1880. Mr. Parmelee was educated at Ferris Institute and entered railway service in the maintenance of way department of the Grand Rapids & Indiana on December 1, 1895. During the next six years he served in this department except for two different periods when he left the service to complete his schooling. In February, 1901, he transferred to the transportation department with headquarters at the local freight office at Grand Rapids but four years later he returned to the maintenance of way department, entering the office of the division engineer as chief clerk. He entered the service of the accounting department on December 5, 1911, as a clerk and has served successively as assistant chief clerk, chief clerk from 1913 to 1920, special agent in closing out federal accounts and general division accountant, the last being the position which he has retained in addition to his new duties and which service he was performing at the time of his recent appointment.

Operating

J. P. Darling, superintendent of the Northern division of the Bangor & Aroostook, has been granted a leave of absence on account of illness. **J. H. Curtis**, trainmaster of the Northern division, will act as superintendent until such time as Mr. Darling is able to resume his duties.

E. F. McPike, superintendent of refrigerator service of the Illinois Central, with headquarters at Chicago, who was granted a leave of absence to serve as chairman of the perishable freight division of the American Railway Association, has resumed his duties with the Illinois Central, effective February 15.

H. S. Taylor, chief dispatcher of the Southern division of the Gulf, Colorado & Santa Fe, has been appointed acting trainmaster of the same division succeeding **F. H. Christian**, who has been assigned to special duties. **J. J. Paul**, assistant chief dispatcher, has succeeded Mr. Taylor as chief dispatcher.

Traffic

S. C. Rhodes has been appointed general agent, passenger department, of the Union Pacific, with headquarters at Kansas City, Mo., effective March 1.

J. D. McCartney has been appointed assistant general passenger agent of the Central of Georgia with headquarters at Savannah, Ga., effective March 1.

E. A. Shreve has been appointed district passenger agent of the Union Pacific, with headquarters at Salt Lake City, Utah. The position of general agent, passenger department, at that point has been abolished.

A. C. Hilton, general agent passenger department of the Erie, with headquarters at Buffalo, N. Y., has been appointed general eastern passenger agent, with headquarters at New York, effective March 1, succeeding J. Buckley, deceased.

J. H. Webster, general agent of the Erie, with headquarters at Cincinnati, O., has been appointed general agent passenger department, with headquarters at Buffalo, N. Y. **J. A. Dolan** succeeds Mr. Webster as general agent at Cleveland.

J. O. Goodsell, assistant general passenger agent of the Union Pacific, with headquarters at Kansas City, Mo., has been transferred to Omaha, Neb., in the same capacity. Mr. Goodsell will have charge of work in connection with the organization and solicitation of outside agencies.

E. P. Fisher, traveling freight agent on the Atchison, Topeka & Santa Fe, with headquarters at Cincinnati, Ohio, has been appointed to general agent, with headquarters at Indianapolis, Ind. **Charles Moore**, city passenger agent at Wichita, Kan., has been promoted to general agent, with headquarters at Des Moines, Ia., succeeding **S. Larimer**, who has been transferred to Atlanta, Ga., succeeding **W. J. Curtis**, who has been transferred to Buffalo, N. Y.

C. W. Dorflinger has been appointed district freight and passenger representative on the Baltimore & Ohio, with headquarters at Los Angeles, Cal. **A. G. Mariner** has been appointed district freight representative with headquarters at San Francisco, and **S. M. Tate** has been appointed district passenger representative, with the same headquarters, effective February 1, the date on which these new outlying agencies were opened by the company. Other appointments on this road are **L. G. Reynolds**, recently made district freight and passenger representative at Omaha, Neb., and **J. P. Hanley**, freight representative at Chicago.

Mechanical

J. B. Merritt has been appointed road foreman of engines on the Second district of the New Mexico division of the Atchison, Topeka & Santa Fe, with headquarters at Raton, N. M., succeeding **J. T. Stuvort**, who has been transferred to the Third district.

Engineering, Taintenance of Way and Signaling

C. T. Jackson, district engineer on the Chicago, Milwaukee & St. Paul, with headquarters at Chicago, has been promoted to principal assistant engineer, with the same headquarters, effective February 21, and the two offices of district engineer on the Southern district have been consolidated.

E. R. Lewis, whose appointment as office engineer of the Michigan Central, with headquarters at Detroit, Mich., was announced in the *Railway Age* of February 18 (page 440), was born on November 20, 1869, at Raritan, N. J. He graduated from the State University of Iowa in 1890 and entered railway service with the Missouri Pacific in 1885. During the next two years he served as axeman and rodman on construction work with that company and during the next seven years he served successively as levelman, clerk in the timber department, levelman on bridge location, division engineer, and as a reclamation engineer in Wyoming. In 1896, he was appointed division engineer in charge of work on the government levees in connection with Mississippi river improvements. Mr. Lewis spent seven years in construction work on the Cape of Good Hope government railways in South Africa, and from August, 1906, to June, 1912, he served as division engineer on the Michigan Central, with headquarters at Bay City, Mich. On the latter date he was appointed assistant to the general manager of the Duluth, South Shore & Atlantic, with headquarters at Duluth, Minn. His jurisdiction was later extended over all matters pertaining to the engineering department of this road. He resigned this position in February, 1919, to become editor of the Maintenance of Way Cyclopedia, a Simmons-Boardman publication, at the conclusion of which work he resigned to return to the Michigan Central, as announced above.

Obituary

F. E. Shrimpton, general auditor of the Canadian Pacific, died of heart disease in Montreal, on March 2, aged 53.